#### Circular dated 4 June 2020

This Circular is important and requires your immediate attention. Please read it carefully.

If you are in doubt about its contents or the action that you should take, you should consult your stockbroker, bank manager, solicitor, accountant, tax adviser or other independent professional adviser immediately.

If you have sold or transferred all your ordinary shares in the share capital of Singapore eDevelopment Limited (the "**Company**"), you should forward this Circular together with the Notice of Extraordinary General Meeting and the attached Proxy Form immediately to the purchaser or the transferee or to the stockbroker, bank or agent through whom the sale or transfer was effected for onward transmission to the purchaser or the transferee.

This Circular has been prepared by the Company and its contents have been reviewed by Hong Leong Finance Limited (the "Sponsor") for compliance with the Singapore Exchange Securities Trading Limited (the "SGX-ST") Listing Manual Section B: Rules of Catalist. This Circular has not been examined or approved by the SGX-ST. The SGX-ST assumes no responsibility for the contents of this Circular, including the correctness of any of the statements or opinions made or reports contained in this Circular.

The contact person for the Sponsor is Mr Tang Yeng Yuen, Vice President, Head of Corporate Finance, Hong Leong Finance Limited, at 16 Raffles Quay #01-05 Hong Leong Building Singapore 048581, telephone (+65) 6415 9886.



### Singapore eDevelopment Limited

(Incorporated in the Republic of Singapore) (Company Registration Number 200916763W)

# CIRCULAR TO SHAREHOLDERS IN RELATION TO THE PROPOSED US\$50 MILLION SHARE SWAP

Independent Financial Adviser in relation to the Proposed US\$50 million Share Swap



#### W Capital Markets Pte. Ltd.

(Incorporated in the Republic of Singapore) (Company Registration Number 201813207E)

#### **Important Dates and Times:**

Last date and time for lodgement of Proxy Form : 23 June 2020 at 11.30 a.m. (Singapore Time)

Date and time of Extraordinary General Meeting : 26 June 2020 at 11.30 a.m. (Singapore Time) or as soon

as practicable immediately following the conclusion or adjournment of the Annual General Meeting of the Company to be held on the same day at 10.30 a.m.

(Singapore Time)

### **CONTENTS**

		PAGE	
DEFIN	ITIONS	1	
LETTE	ER TO SHAREHOLDERS		
1.	INTRODUCTION	5	
2.	THE PROPOSED US\$50 MILLION SHARE SWAP	6	
3.	CONSENTS	26	
4.	DIRECTORS' AND SUBSTANTIAL SHAREHOLDERS' INTERESTS	26	
5.	DIRECTORS' RECOMMENDATION	27	
6.	DIRECTORS' RESPONSIBILITY STATEMENT	27	
7.	EXTRAORDINARY GENERAL MEETING	27	
8.	ACTION TO BE TAKEN BY SHAREHOLDERS	27	
9.	DOCUMENTS AVAILABLE FOR INSPECTION	29	
APPE	NDIX A – VALUATION REPORT	A-1	
APPE	NDIX B – IFA LETTER	B-1	
APPENDIX C – ALTERNATIVE ARRANGEMENTS			
NOTIC	E OF EXTRAORDINARY GENERAL MEETING	N-1	
PROX	Y FORM		

In this Circular, the following definitions apply throughout unless the context requires otherwise or unless otherwise stated:

"associate"

- (a) In relation to any director, chief executive officer, substantial shareholder or controlling shareholder (being an individual) means:
  - (i) his immediate family:
  - (ii) the trustees of any trust of which he or his immediate family is a beneficiary or, in the case of a discretionary trust, is a discretionary object; and
  - (iii) any company in which he and his immediate family together (directly or indirectly) have an interest of 30% or more; and
- (b) In relation to a substantial shareholder or a controlling shareholder (being a company) means any other company which is its subsidiary or holding company or is a subsidiary of such holding company or one in the equity of which it and/or such other company or companies taken together (directly or indirectly) have an interest of 30% or more

"Audit and Risk Management Committee" The audit and risk management committee of the Company comprising Mr Wong Shui Yeung (Chairman), Mr Wong Tat Keung and Mr Chan King Fai

"Board" : The board of directors of the Company as at the date of this Circular

"Catalist Rules" : The SGX-ST Listing Manual Section B: Rules of Catalist, as may be

or from time to time, as the case may be

The SGX-ST Listing Manual Section B: Rules of Catalist, as may be amended, supplemented or modified from time to time

"Catalist" : The sponsor-supervised listing platform of the SGX-ST

"CDP : The Central Depository (Pte) Limited

"Circular" : This circular to Shareholders dated 4 June 2020 in relation to the

Proposed US\$50 million Share Swap

"Companies Act" : The Companies Act, Cap. 50 of Singapore, as may be amended,

supplemented or modified from time to time

"Company" : Singapore eDevelopment Limited

"Consideration" : US\$50 million. Further details on the Consideration are set out in

Section 2.5 of this Circular

"Constitution" : The constitution of the Company, as may be amended,

supplemented or modified from time to time

"controlling shareholder" : A person who:

(a) holds directly or indirectly 15% or more of the nominal amount of all voting shares in a company. The SGX-ST may determine that a person who satisfies this paragraph is not a controlling

shareholder; or

(b) in fact exercises control over a company

"Director" : A director of the Company as at the date of this Circular or from time

to time, as the case may be

"DSS BioHealth" : DSS BioHealth Security, Inc.

"DSS" : Document Security Systems, Inc.

"EGM" : The extraordinary general meeting of the Company to be convened

and held, notice of which is set out on page N-1 of this Circular

"EPS" : Earnings per Share

"FY" : Financial year ended or ending 31 December, as the case may be

"Global BioMedical" : Global BioMedical Pte. Ltd., a wholly-owned direct subsidiary of the

Company

"Group" : The Company and its subsidiaries collectively

"IFA Letter" : The letter dated 4 June 2020 issued by the IFA containing the

opinion of the IFA on whether the Proposed US\$50 million Share Swap is on normal commercial terms and prejudicial to the interests of the Company and its minority Shareholders as set out in

Appendix B to this Circular

"IFA" : W Capital Markets Pte. Ltd., the independent financial adviser,

appointed by the Company to opine on whether the Proposed US\$50 million Share Swap is on normal commercial terms and prejudicial to the interests of the Company and its minority

Shareholders

"Impact BioMedical" : Impact BioMedical, Inc., a wholly-owned direct subsidiary of Global

BioMedical

"Independent Valuer" : Destum Partners, Inc.

"Latest Practicable Date" : 1 June 2020, being the latest practicable date prior to the issue of

this Circular

"LPS" : Losses per Share

"New DSS Common Stock" : The 483,334 new common stock in the stock capital of DSS to be

allotted and issued to Global BioMedical pursuant to the Proposed

US\$50 million Share Swap

"Notice of EGM" : The notice of EGM which is set out on page N-1 of this Circular

"NAV" : Net asset value

"NLV" : Net liability value

"NTA" : Net tangible assets

"NTL" : Net tangible liabilities

"Ordinary Resolution" : The ordinary resolution as set out in the Notice of EGM

Preferred Stock"

"Perpetual Convertible DSS : The 46.868 perpetual convertible preferred stock in the stock capital of DSS to be allotted and issued to Global BioMedical pursuant to the Proposed US\$50 million Share Swap which are convertible into common stock in the stock capital of DSS

"Proposed US\$50 million Share Swap"

- (a) The disposal of 13,897,069 Sale Shares held by Global BioMedical, representing the entire issued and paid-up share capital of Impact BioMedical as at the Latest Practicable Date, to DSS BioHealth; and
- (b) The allotment and issue of 483,334 New DSS Common Stock. representing approximately 18.87% of the total issued and paid-up stock capital of DSS on an enlarged basis comprising 2,562,021 common stock as at the Latest Practicable Date, to Global BioMedical.

Further details on the Proposed US\$50 million Share Swap are set out in Section 2 of this Circular

"Proxy Form" The proxy form in respect of the EGM which is attached to this

Circular

"S\$" and "Singapore cents" Singapore dollars and cents respectively, the lawful currency of

Singapore

"Sale Shares" The 13,897,069 ordinary shares in the share capital of Impact

> BioMedical, representing the entire issued and paid-up share capital of Impact BioMedical as at the Latest Practicable Date, to be disposed to DSS BioHealth pursuant to the Proposed US\$50 million

Share Swap

"Securities Accounts" The securities accounts maintained by Depositors with CDP, but

not including the securities accounts maintained with a Depository

Agent

"SFA" : The Securities and Futures Act, Cap. 289 of Singapore, as may be

amended, supplemented or modified from time to time

"SGX-ST" Singapore Exchange Securities Trading Limited

"Share Exchange Agreement"

The share exchange agreement dated 21 April 2020 entered into between the Company, Global BioMedical, DSS and DSS BioHealth in relation to, inter alia, the Proposed US\$50 million

Share Swap

"Shareholders" The registered holders of Shares, except that where the registered

> holder is CDP, the term "Shareholders" in relation to Shares held by CDP shall mean the persons named as Depositors in the Depository Register maintained by CDP and to whose Securities

Accounts such Shares are credited

"Shares" Ordinary shares in the share capital of the Company

"Sponsor" : Hong Leong Finance Limited

"Substantial Shareholder" : A person who has an interest or interests in one or more voting

Shares in the Company and the total votes attached to that Share, or those Shares, is not less than 5% of the total votes attached to

all the voting Shares in the Company

"Term Sheet" : The legally binding term sheet dated 12 March 2020 entered into

between Global BioMedical, Impact BioMedical, DSS and DSS BioHealth in relation to, *inter alia*, the Proposed US\$50 million

Share Swap

"US\$" : United States dollars, the lawful currency of the United States of

America

"Valuation Report" : The valuation report issued by the Independent Valuer in April 2020

on the assets held by Impact BioMedical as set out in Appendix A

to this Circular

"%" : Per centum or percentage

The terms "Depositor", "Depository Agent" and "Depository Register" shall have the same meanings ascribed to them respectively in Section 81SF of the SFA.

The terms "associated company" and "subsidiary" shall have the same meanings ascribed to them in the Catalist Rules and the Companies Act, as the case may be.

Any reference in this Circular to any enactment is a reference to that enactment as for the time being amended or re-enacted. Any word or term defined under the Companies Act, the SFA, the Catalist Rules or any statutory modification thereof and used in this Circular shall, where applicable, have the same meaning ascribed to it under the Companies Act, the SFA, the Catalist Rules or any statutory modification thereof, as the case may be, unless the context requires otherwise.

Words importing the singular shall, where applicable, include the plural and *vice versa*, and words importing the masculine gender shall, where applicable, include the feminine and neuter genders and *vice versa*. References to "persons" shall, where applicable, include corporations.

Any reference to a time of day or date in this Circular shall be a reference to Singapore time and dates, unless otherwise stated.

Any discrepancies in the figures in this Circular between the listed amounts and the totals thereof are due to rounding. Accordingly, figures shown as totals in this Circular may not be an arithmetic aggregation of the figures that precede them.

The headings in this Circular are inserted for convenience only and shall be ignored in construing this Circular.

### Singapore eDevelopment Limited

(Incorporated in the Republic of Singapore) (Company Registration Number 200916763W)

#29-01B Suntec Tower One

Singapore 038987

Board of Directors: Registered Office:

Chan Heng Fai (Executive Chairman, Executive Director and Chief 7 Temasek Boulevard

Executive Officer)

Lam Lee G. (Non-Executive Vice Chairman and Non-Executive

Director)

Tao Yeoh Chi
Wong Tat Keung
Chan King Fai
Wong Shui Yeung

(Lead Independent Non-Executive Director)
(Independent Non-Executive Director)
(Independent Non-Executive Director)
(Independent Non-Executive Director)

4 June 2020

To: The Shareholders of Singapore eDevelopment Limited

Dear Sir/Madam,

#### THE PROPOSED US\$50 MILLION SHARE SWAP

#### 1. INTRODUCTION

#### 1.1 Extraordinary General Meeting

- 1.1.1 The Board is convening an EGM to seek Shareholders' approval for the Proposed US\$50 million Share Swap.
- 1.1.2 The Proposed US\$50 million Share Swap is an "interested person transaction" under Chapter 9 of the Catalist Rules which has a value of more than 5% of the Group's latest NTA. Accordingly, the Proposed US\$50 million Share Swap is conditional upon approval by Shareholders at the EGM. Further details on the Proposed US\$50 million Share Swap as an "interested person transaction" under Chapter 9 of the Catalist Rules are set out in **Section 2.9** of this Circular.
- 1.1.3 Based on the relative figures computed on the bases set out in Rule 1006 of the Catalist Rules, the Proposed US\$50 million Share Swap is classified as a "major transaction" under Chapter 10 of the Catalist Rules Manual. Accordingly, the Proposed US\$50 million Share Swap is conditional upon approval by Shareholders at the EGM. Further details on the relative figures computed on the bases set out in Rule 1006 of the Catalist Rules relating to the Proposed US\$50 million Share Swap are set out in **Section 2.10** of this Circular.

#### 1.2 Circular

- The purpose of this Circular is to provide Shareholders with relevant information relating to, and to seek Shareholders' approval for, the Proposed US\$50 million Share Swap. Shareholders' approval will be sought at the EGM to be convened and held, notice of which is set out on page N-1 of this Circular.
- 1.2.2 The SGX-ST assumes no responsibility for the contents of this Circular, including the correctness of any of the statements or opinions made or reports contained in this Circular.

#### 2. THE PROPOSED US\$50 MILLION SHARE SWAP

#### 2.1 Introduction

- 2.1.1 On 16 March 2020, the Company announced, *inter alia*, that a legally binding term sheet dated 12 March 2020 (the "**Term Sheet**") had been entered into between Global BioMedical Pte. Ltd. ("**Global BioMedical**"), Impact BioMedical, Inc. ("**Impact BioMedical**"), Document Security Systems, Inc. ("**DSS**") and DSS BioHealth Security, Inc. ("**DSS BioHealth**") in relation to, *inter alia*:
  - (a) the disposal of 1,000 Sale Shares¹ held by Global BioMedical, representing the entire issued and paid-up share capital of Impact BioMedical as at 16 March 2020, to DSS BioHealth; and
  - (b) the allotment and issue of 14,500,000<sup>2</sup> New DSS Common Stock, representing approximately 18.93% of the total issued and paid-up stock capital of DSS on an enlarged basis comprising 76,586,099 common stock as at 16 March 2020, to Global BioMedical.

#### (the "Proposed US\$50 million Share Swap").

- 2.1.2 On 9 April 2020, the Company announced, *inter alia*, that the Company had, on 1 April 2020, appointed W Capital Markets Pte. Ltd. (the "**IFA**") as the independent financial adviser to opine on whether the Proposed US\$50 million Share Swap is on normal commercial terms and prejudicial to the interests of the Company and its minority Shareholders.
- 2.1.3 On 4 May 2020, the Company announced, *inter alia*, that a share exchange agreement dated 21 April 2020 (the "**Share Exchange Agreement**") had been entered into between the Company, Global BioMedical, DSS and DSS BioHealth in relation to, *inter alia*, the Proposed US\$50 million Share Swap. The Share Exchange Agreement was fully executed by the aforesaid parties on 27 April 2020.
- 2.1.4 The Proposed US\$50 million Share Swap is an "interested person transaction" under Chapter 9 of the Catalist Rules and is classified as a "major transaction" under Chapter 10 of the Catalist Rules.
- 2.1.5 Impact BioMedical is a wholly-owned direct subsidiary of Global BioMedical, which is a wholly-owned direct subsidiary of the Company. Impact BioMedical will cease to be a subsidiary of the Group upon completion of the Proposed US\$50 million Share Swap.

<sup>&</sup>lt;sup>1</sup> Further to the announcement made by the Company on 16 March 2020, Global BioMedical subscribed for, and Impact BioMedical allotted and issued 13,896,069 new ordinary shares in the share capital of Impact BioMedical to Global BioMedical for a total subscription price of US\$2,779,214 (the "Impact BioMedical Subscription"). The total subscription price of US\$2,779,214 represented the outstanding sums due and owing by Impact BioMedical to Global BioMedical. Following the Impact BioMedical Subscription, the number of Sale Shares to be disposed to DSS BioHealth comprises 13,897,069 ordinary shares in the share capital of Impact BioMedical, representing the entire issued and paid-up share capital of Impact BioMedical as at the Latest Practicable Date.

<sup>&</sup>lt;sup>2</sup> Further to the announcement made by the Company on 16 March 2020, DSS completed a stock consolidation of every 30 existing common stock in the stock capital of DSS into one (1) consolidated common stock in the stock capital of DSS (the "**DSS Stock Consolidation**"). Following the DSS Stock Consolidation, the number of New DSS Common Stock to be allotted and issued to Global BioMedical was adjusted accordingly and comprises 483,334 new common stock in the stock capital of DSS, representing approximately 18.87% of the total issued and paid-up stock capital of DSS on an enlarged basis comprising 2,562,021 common stock as at the Latest Practicable Date.

#### 2.2 Information on Document Security Systems, Inc.

The information on DSS provided below was provided to the Company by DSS. In respect of such information, the Board has not conducted an independent review or verification of the accuracy and correctness of the statements and information below. The Board's responsibility is limited to the proper extraction and reproduction herein in the context that is being disclosed in this Circular.

- 2.2.1 DSS is a company incorporated in New York, United States of America in 1984 and has an issued and paid-up stock capital of US\$119,704,000 comprising 2,078,687 common stock as at the Latest Practicable Date. DSS is listed on the New York Stock Exchange and is an industry leader in providing innovative anti-counterfeit, authentication and brand protection solutions to protect corporations, financial institutions and governments from counterfeiting and fraud.
- 2.2.2 Mr Chan Heng Fai, who is a Director, the Chief Executive Officer and a controlling shareholder of the Company, holds, directly and indirectly, 765,156 common stock in the stock capital of DSS, representing approximately 36.81% of the total issued and paid-up stock capital of DSS, as at the Latest Practicable Date. Accordingly, DSS is an associate of Mr Chan Heng Fai.

#### 2.3 Information on Impact BioMedical, Inc.

2.3.1 Corporate Information on Impact BioMedical, Inc.

Impact BioMedical is a company incorporated in Nevada, United States of America on 16 October 2018 and has an issued and paid-up share capital of US\$2,779,214 comprising 13,897,069 ordinary shares as at the Latest Practicable Date.

Impact BioMedical leverages on its scientific know-how and intellectual property rights to provide solutions that have been plaguing the biomedical field for decades. Impact BioMedical, together with its scientific partners, pledges to undertake a concerted effort in research and development, and drug discovery and development for the prevention, inhibition and treatment of neurological, oncological and immune-related diseases.

2.3.2 <u>Financial Information on Impact BioMedical, Inc.</u>

Based on the audited consolidated financial statements of the Group for FY2019:

- (a) the NLV and NTL value represented by the Sale Shares was approximately S\$2.26 million (equivalent to approximately US\$1.68 million based on an exchange rate as at 31 December 2019 of US\$1: S\$1.3461) as at 31 December 2019; and
- (b) the net losses attributable to Impact BioMedical was approximately S\$0.70 million (equivalent to approximately US\$0.51 million based on an exchange rate as at 31 December 2019 of US\$1: S\$1.3461) as at 31 December 2019.

The gain on disposal after completion of the disposal of the Sale Shares to DSS BioHealth amounts to approximately S\$72.46 million (equivalent to approximately US\$51.68 million based on an average exchange rate of US\$1: S\$1.4022).

The total amount of funds invested by the Group into Impact BioMedical amounts to approximately US\$2,979,214 as at the Latest Practicable Date, which have been or will be mainly utilised for research and development expenses, legal fees and consulting fees.

Based on the audited consolidated financial statements of the Group for FY2019, the Group's biomedical business, which includes Impact BioMedical and its subsidiaries, contributes approximately 5.90% of the Group's total revenue for FY2019 and assets attributable to the Group's biomedical business accounts for approximately 2.90% of the Group's total assets recognised in its balance sheet as at 31 December 2019.

#### 2.3.3 Valuation on the Assets held by Impact BioMedical, Inc.

Pursuant to Rule 1014(5) of the Catalist Rules, the Company must appoint a competent and independent valuer to value Impact BioMedical as certain relative figures computed on the bases set out in Rule 1006 of the Catalist Rules relating to the Proposed US\$50 million Share Swap exceeds 75%.

DSS has commissioned the Independent Valuer, Destum Partners, Inc., to conduct an independent valuation on four (4) distinct assets held by Impact BioMedical. According to the Valuation Report issued by the Independent Valuer in April 2020:

- (a) The four (4) distinct assets held by Impact BioMedical had a valuation of approximately US\$382 million as at a valuation date of April 2020. Impact BioMedical owns certain percentages of each of these four (4) distinct assets and the valuations of each of these four (4) distinct assets were adjusted accordingly.
- (b) The Independent Valuer valued the four (4) distinct assets held by Impact BioMedical using a number of industry accepted valuation methodologies. The valuation methodology used was specific to each distinct asset held by Impact BioMedical. The valuation methodologies used comprise, *inter alia*, risk adjusted net present value, market and transaction comparables, sales multiples and discounted cash flow with perpetuity.

A copy of the Valuation Report is set out in **Appendix A** to this Circular. Shareholders are advised to refer to the full text of the Valuation Report for further details.

#### 2.3.4 Separate Valuation on the Assets held by Impact BioMedical, Inc.

According to an announcement made by the Company on 1 June 2020:

- (a) Impact BioMedical's scientific research partner, GRDG Sciences, LLC ("GRDG Sciences"), commissioned a separate independent valuer to conduct a separate independent valuation on four (4) distinct assets held by Impact BioMedical.
- (b) These four (4) distinct assets are mainly co-owned by Impact BioMedical and GRDG Sciences.
- (c) According to the separate valuation report issued by the separate independent valuer, the four (4) distinct assets held by Impact BioMedical had a valuation of approximately US\$1.39 billion as at a valuation date of 26 May 2020 and a valuation of approximately US\$933 million after adjusting for Impact BioMedical's ownership percentages of each of these four (4) distinct assets.
- (d) The separate independent valuation was initiated by GRDG Sciences to take into consideration additional applications of the four (4) distinct assets held by Impact BioMedical and in particular, for the treatment of certain diseases which were not considered in the Valuation Report issued by the Independent Valuer in April 2020.
- (e) The separate independent valuation shall not vary the terms of the Share Exchange Agreement and/or the Proposed US\$50 million Share Swap.

The primary purpose of the separate independent valuation report is to facilitate the marketing and commercialisation of such assets.

#### 2.3.5 Further Information on the Assets held by Impact BioMedical

The four (4) distinct assets held by Impact BioMedical which are subject to the independent valuation and the separate independent valuation are Linebacker, Equivir, Laetose and Functional Fragrance Formulation.

#### (a) Linebacker

Linebacker is a broad-spectrum therapeutic platform to address emerging pandemics such Alzheimer's diabetes. cancer. drug-resistant viruses antibiotic-resistant bacteria. Linebacker is regulated as a drug. Linebacker is in the pre-clinical trial stage as at the Latest Practicable Date. The independent valuation conducted on Linebacker by the Independent Valuer assumed that (i) Linebacker 1 for the treatment of Parkinson's Disease would be launched in 2027 with a total expenditure of approximately US\$42.00 million over a period of six (6) years for clinical, regulatory and manufacturing costs; (ii) Linebacker 1 for the treatment of Huntington's Disease would be launched in 2027 with a total expenditure of approximately US\$15.00 million over a period of six (6) years for clinical, regulatory and manufacturing costs; and (iii) Linebacker 2 for the treatment of Respiratory Syncytial Virus would be launched in 2029 with a total expenditure of approximately US\$54.00 million over a period of nine (9) years for clinical, regulatory and manufacturing costs.

#### (b) Equivir

Equivir is a patented medical treatment and preventative drug intended to be used to address a broad range of viruses responsible for deadly infectious diseases. Equivir is regulated as a drug. Equivir is in the investigational new drug filing stage as at the Latest Practicable Date. The independent valuation conducted on Equivir by the Independent Valuer assumed that Equivir for the treatment of influenza would be launched in the second half of 2024 and assumed a total expenditure of approximately US\$45.00 million over a period of four (4) years for clinical, regulatory and manufacturing costs.

#### (c) Laetose

Laetose is a breakthrough low-calorie, low glycaemic index, natural, modified sugar which has the potential to affect the world's sugar market. Laetose is a functional sugar that possesses low glycaemic properties which also assists in mitigating inflammatory responses. Laetose has attained the GRAS (generally recognised as safe) designation from the United States Food and Drug Administration. Laetose is in the process of being patented as at the Latest Practicable Date. Laetose is ready for commercialisation but requires market penetration, marketing, branding and an established sales distribution network. The independent valuation conducted on Laetose by the Independent Valuer assumed that Laetose would be launched in 2021 and assumed a projected potential revenue of approximately US\$17.88 million for FY2021 based on the projected sales targets.

#### (d) Functional Fragrance Formulation ("**3F**")

3F is a suite of functional fragrances developed for industrial and medical applications to fight mosquito-borne diseases. 3F is expected to be regulated as a pesticide with the United States Environmental Protection Agency. 3F is in the commercialisation stage as at the Latest Practicable Date. 3F requires market penetration, marketing, branding and an established sales distribution network. The independent valuation conducted on 3F by the Independent Valuer assumed that 3F would be launched in 2020 and assumed a projected potential revenue of approximately US\$2.99 million for FY2020 based on the projected sales targets.

#### 2.4 Rationale for the Proposed US\$50 million Share Swap

2.4.1 The Board believes that the Proposed US\$50 million Share Swap will form a strategic relationship between the Company and DSS. The Proposed US\$50 million Share Swap also allows the Company to realise the potential of its subsidiary, Impact BioMedical, and reinforce its position as a global corporation. In addition, the Board believes that there are various synergies between the DSS' security solutions and Impact BioMedical's expertise and know-how in the biomedical industry.

#### (a) Synergies for Impact BioMedical

The Board believes that the anti-counterfeit, authentication and brand protection solutions offered by DSS will assist in protecting Impact BioMedical's product packaging from counterfeiting and fraud, allow consumers to authenticate Impact BioMedical's products, and in doing so, safeguard the integrity and value of Impact BioMedical's brand.

In addition, the management is of the view that as a subsidiary of a company listed on the New York Stock Exchange, Impact BioMedical will be able to attract a wider pool of institutional investors based in the United States of America and collaborate with a wider pool of scientific partners in the biomedical industry based in the United States of America. The management is also of the view that DSS, being listed on the New York Stock Exchange, is able to raise more funds to commercialise the assets held by Impact BioMedical given that retail investors based in the United States of America will have a better understanding of Impact BioMedical's management, Impact BioMedical's collaborations with its scientific partners, the testing of Impact BioMedical's assets and accreditations of assets held by Impact BioMedical, all of which are based in the United States of America.

#### (b) Synergies for DSS

DSS is constantly adapting to the dynamic and ever-changing landscape to stay ahead of its competition. DSS recognises that the biomedical security sector is emerging as a new sector in the security space. Acquiring Impact BioMedical as a subsidiary through the Proposed US\$50 million Share Swap will allow DSS to collaborate with Impact BioMedical to develop biomedical security solutions for Impact BioMedical's current products and future products in the pipeline. In addition, DSS hopes to expand its anti-counterfeit, authentication and brand protection solutions to cover the biomedical security sector by tapping into Impact BioMedical's expertise and know-how in the biomedical industry.

2.4.2 For the aforementioned reasons, the Board is confident that the Proposed US\$50 million Share Swap will bring value to Shareholders and that the Proposed US\$50 million Share Swap is in the best interests of the Company and its Shareholders.

#### 2.5 Consideration

- 2.5.1 The consideration for the disposal of the Sale Shares to DSS BioHealth is US\$50 million (the "Consideration"). The Consideration shall be paid by allotting and issuing:
  - (a) 483,334 New DSS Common Stock with a stated value of US\$3,132,000 or US\$6.48 per New DSS Common Stock and a par value of US\$0.02 for each New DSS Common Stock; and
  - (b) 46,868 Perpetual Convertible DSS Preferred Stock with a stated value of US\$46,868,000 or US\$1,000 per Perpetual Convertible DSS Preferred Stock and a par value of US\$0.02 for each Perpetual Convertible DSS Preferred Stock. The Perpetual Convertible DSS Preferred Stock in the stock capital of DSS, provided always that the right of conversion shall not be exercised by Global BioMedical to the extent that Global BioMedical holds more than 19.99% of the total issued and paid-up stock capital of DSS on an enlarged basis after such conversion. Further details on the Perpetual Convertible DSS Preferred Stock are set out in Section 2.8 of this Circular.
- 2.5.2 For the avoidance of doubt, the New DSS Common Stock and the common stock in the stock capital of DSS to be allotted and issued pursuant to the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock shall not be subject to any moratorium requirements.
- 2.5.3 According to the announcement made by the Company on 16 March 2020, the Consideration was arrived at arm's length and on a willing-buyer-willing-seller basis, after taking into account, *inter alia*, the following:
  - (a) the NLV and NTL value represented by the Sale Shares of approximately S\$3.43 million (equivalent to approximately US\$2.55 million based on an exchange rate as at 31 December 2019 of US\$1 : S\$1.3461) as at 31 December 2019 based on the unaudited consolidated financial statements of the Group for FY2019; and
  - (b) the prevailing economic conditions.

#### 2.6 Intended Use of Proceeds

- 2.6.1 The Consideration represents an excess of approximately S\$72.46 million (equivalent to approximately US\$51.68 million based on an average exchange rate of US\$1: S\$1.4022) over the NLV and NTL Value of the Sale Shares of S\$2.26 million (equivalent to approximately US\$1.68 million based on an exchange rate as at 31 December 2019 of US\$1: S\$1.3461) as at 31 December 2019 based on the audited consolidated financial statements of the Group for FY2019.
- 2.6.2 The estimated costs and expenses incurred or to be incurred in connection with the disposal of the Sale Shares to DSS BioHealth is approximately S\$100,000 which will be funded through the Group's internal resources. The proceeds from the disposal of the Sale Shares to DSS BioHealth is therefore the Consideration of US\$50 million.
- 2.6.3 The Company intends to utilise the proceeds from disposal of the Sale Shares to DSS BioHealth as follows:

	Allocation of Proceeds		
Intended Use of Proceeds	(US\$)	(%)	
Subscription of 483,334 New DSS Common Stock	3,132,000	6.26	
Subscription of 46,868 Perpetual Convertible DSS Preferred Stock	46,868,000	93.74	

#### 2.7 Principal Terms of the Share Exchange Agreement

#### 2.7.1 Key Conditions

The completion of the disposal of the Sale Shares to DSS BioHealth contemplated under the Share Exchange Agreement is subject to a number of customary conditions. The key conditions include, *inter alia*, the following:

- (a) The Company having obtained approvals from its Shareholders and DSS having obtained approvals from its stockholders;
- (b) The Company having obtained the requisite approvals from the SGX-ST, if required; and
- (c) Receipt of the audited financials of Impact BioMedical by DSS.

#### 2.7.2 Representations and Warranties

The Share Exchange Agreement contains customary representations, warranties and covenants, including representations and warranties from DSS and DSS BioHealth that certain disclosures will be delivered on or before, and that certain statements contained in the Share Exchange Agreement will be correct as at, the date on which the Company makes the Notice of EGM and this Circular available on SGXNET. Likewise, the Company and Global BioMedical represent and warrant that certain disclosures will be delivered on or before, and that certain statements contained in the Share Exchange Agreement will be correct as at, the date on which DSS first files a preliminary proxy statement in connection with a meeting of DSS's stockholders to consider and vote on the transactions contemplated by the Share Exchange Agreement.

#### 2.7.3 <u>Non-Competition; Non-Solicitation</u>

For a period of five (5) years commencing on the completion date (the "**Restricted Period**"), neither the Company nor Global BioMedical shall, nor shall any of its affiliates be permitted to, directly or indirectly:

- (a) engage in or assist others in engaging in biomedical sciences research and development for licensing and distribution in the areas of healthcare and consumer products (the "Restricted Business") in the United States of America and its Territories and Possessions (the "Territory");
- (b) have an interest in any individual, corporation, partnership, joint venture, limited liability company, governmental authority, unincorporated organisation, trust, association or other entity ("Person") that engages directly or indirectly in the Restricted Business in the Territory in any capacity, including as a partner, shareholder, member, employee, principal, agent, trustee or consultant; or
- (c) intentionally interfere in any material respect with the business relationships (whether formed prior to or after the date of the Share Exchange Agreement) between any member of Impact BioMedical and its subsidiaries (the "Impact BioMedical Group") and customers or suppliers of any member of the Impact BioMedical Group.

Notwithstanding sub-paragraph (b) above, the Company, Global BioMedical or their affiliates may own, directly or indirectly, solely as an investment, securities of any such Persons that are traded on any national securities exchange if the Company, Global BioMedical and their affiliates are not controlling Persons of, or members of a group which controls, such Persons and do not, in the aggregate own, directly or indirectly, 5% or more of any class of securities of such Persons.

During the Restricted Period, neither the Company nor Global BioMedical shall, nor shall any of its affiliates be permitted to, directly or indirectly, hire or solicit any employee of the Impact BioMedical Group, encourage any such employee to leave such employment, or hire any such employee who has left such employment, except pursuant to a general solicitation which is not directed specifically to any such employees, provided that nothing shall prevent the Company, Global BioMedical or any of their affiliates from hiring any employee whose employment was terminated by the Impact BioMedical Group or DSS BioHealth.

During the Restricted Period, neither the Company nor Global BioMedical shall, nor shall any of its affiliates be permitted to, directly or indirectly, solicit or entice, or attempt to solicit or entice, any clients or customers of any member of the Impact BioMedical Group or potential clients or customers of any member of the Impact BioMedical Group for purposes of diverting their business or services from any member of the Impact BioMedical Group.

#### 2.7.4 Indemnification by Global BioMedical and the Company

Subject to the other terms and conditions of the Share Exchange Agreement, the Company and Global BioMedical shall, jointly and severally, indemnify and defend each of DSS, DSS BioHealth and their affiliates (including each member of the Impact BioMedical Group) and their respective representatives (collectively, the "**DSS Indemnitees**") against, and shall hold each of them harmless from and against, and shall pay and reimburse each of them for, any and all losses incurred or sustained by, or imposed upon, the DSS Indemnitees based upon, arising out of, with respect to or by reason of:

- (a) any inaccuracy in or breach of any of the representations or warranties of the Company or Global BioMedical contained in the Share Exchange Agreement (other than certain matters as set forth in the Share Exchange Agreement) or in any certificate or instrument delivered by or on behalf of Global BioMedical pursuant to the Share Exchange Agreement, as at the date such representation or warranty was made or as if such representation or warranty was made on and as at the completion date (except for representations and warranties that expressly relate to a specified date, the inaccuracy in or breach of which will be determined with reference to such specified date);
- (b) any breach or non-fulfilment of any covenant, agreement or obligation to be performed by Global BioMedical pursuant to the Share Exchange Agreement; or
- (c) any transaction expenses or indebtedness of any member of the Impact BioMedical Group outstanding as at the completion of the disposal of the Sale Shares to DSS BioHealth.

#### 2.7.5 Termination

The Share Exchange Agreement may be terminated at any time prior to the completion of the disposal of the Sale Shares to DSS BioHealth:

- (a) by mutual written consent of Global BioMedical and DSS BioHealth;
- (b) by written notice from DSS BioHealth to Global BioMedical if:
  - (i) DSS BioHealth is not in material breach of any provision of the Share Exchange Agreement and there has been a breach, inaccuracy in or failure to perform any representation, warranty, covenant or agreement made by Global BioMedical pursuant to the Share Exchange Agreement that would give rise to the failure of certain conditions in the Share Exchange Agreement and such breach, inaccuracy or failure has not been cured by Global BioMedical within 10 days of Global BioMedical's receipt of written notice of such breach from DSS BioHealth; or

- (ii) certain conditions in the Share Exchange Agreement have not been, or if it becomes apparent that any of such conditions will not be, fulfilled by the date that is 180 days after the date of the Share Exchange Agreement, unless such failure shall be due to the failure of DSS BioHealth to perform or comply with any of the covenants, agreements or conditions to be performed or complied with by it prior to the completion of the disposal of the Sale Shares to DSS BioHealth;
- (c) by written notice from Global BioMedical to DSS BioHealth if:
  - (i) Global BioMedical is not in material breach of any provision of the Share Exchange Agreement and there has been a breach, inaccuracy in or failure to perform any representation, warranty, covenant or agreement made by DSS BioHealth pursuant to the Share Exchange Agreement that would give rise to the failure of certain conditions in the Share Exchange Agreement and such breach, inaccuracy or failure has not been cured by DSS BioHealth within 10 days of DSS BioHealth's receipt of written notice of such breach from Global BioMedical; or
  - (ii) certain conditions in the Share Exchange Agreement have not been, or if it becomes apparent that any of such conditions will not be, fulfilled by the date that is 180 days after the date of the Share Exchange Agreement, unless such failure shall be due to the failure of Global BioMedical to perform or comply with any of the covenants, agreements or conditions to be performed or complied with by it prior to the completion of the disposal of the Sale Shares to DSS BioHealth;
- (d) by Global BioMedical or DSS BioHealth in the event that (i) any law that makes consummation of the transactions contemplated by Share Exchange Agreement illegal or otherwise prohibited; or (ii) a government authority issues an order restraining or enjoining the transactions contemplated by the Share Exchange Agreement, and such order becomes final and non-appealable;
- (e) by either Global BioMedical or DSS BioHealth if the stockholders of DSS vote on, but fail to approve, the Share Exchange Agreement and the transactions contemplated thereby; or
- (f) by either Global BioMedical or DSS BioHealth if the Shareholders of the Company vote on, but fail to approve, Ordinary Resolution relating to the Proposed US\$50 million Share Swap at the EGM.

#### 2.8 Principal Terms of the Perpetual Convertible DSS Preferred Stock

- 2.8.1 According to a certificate of designation (the "Certificate of Designation"):
  - (a) Each Perpetual Convertible DSS Preferred Stock shall be convertible into common stock in the stock capital of DSS, provided always that the right of conversion shall not be exercised by Global BioMedical to the extent that Global BioMedical holds more than 19.99% of the total issued and paid-up stock capital of DSS on an enlarged basis after such conversion (the "**Prescribed Conversion Limit**").
  - (b) The Perpetual Convertible DSS Preferred Stock are perpetual securities of DSS with no maturity date, save that DSS shall have the right of redemption as disclosed in sub-paragraph (f) below.
  - (c) The Perpetual Convertible DSS Preferred Stock shall have no voting rights, except as required by applicable laws and regulations.

- (d) No dividends shall accrue or be payable on the Perpetual Convertible DSS Preferred Stock.
- (e) In the event of any voluntary or involuntary liquidation, dissolution or winding up of DSS, Global BioMedical shall be entitled to be paid out of the assets of DSS available for distribution to stockholders of DSS, before any payment shall be made to holders of the common stock or any other class of securities in the stock capital of DSS, an amount in cash equal to the aggregate liquidation value of all Perpetual Convertible DSS Preferred Stock held by Global BioMedical. Each Perpetual Convertible DSS Preferred Stock shall have a liquidation value of US\$1,000.
- (f) At any time and from time to time on or after the date of issuance of the Perpetual Convertible DSS Preferred Stock, DSS shall have the right to redeem all or part of the outstanding Perpetual Convertible DSS Preferred Stock at the liquidation value of US\$1,000 per Perpetual Convertible DSS Preferred Stock by sending a written notice (the "Redemption Notice") to Global BioMedical not less than 30 days before the redemption date. The Redemption Notice shall set out, inter alia, the date upon which Global BioMedical's right of conversion terminates (the "Conversion Election Date") which shall be no earlier than five (5) days before the redemption date. Notwithstanding anything to the contrary, Global BioMedical shall have the right to exercise its right of conversion instead of giving effect to the redemption by DSS but has to do so before the Conversion Election Date.
- 2.8.2 The conversion price for the Perpetual Convertible DSS Preferred Stock is US\$6.48<sup>3</sup> (the "Conversion Price").
  - (a) Adjustment to Conversion Price upon Dividend, Subdivision or Combination

If DSS shall, at any time or from time to time after the date of issuance of the Perpetual Convertible DSS Preferred Stock, (i) pay a dividend or make any other distribution to holders of the common stock or any other class of securities in the stock capital of DSS by way of common stock in the stock capital of DSS, options or convertible securities; or (ii) subdivide (by stock split, recapitalisation or otherwise) the common stock in the stock capital of DSS into a greater number of common stock, the Conversion Price immediately prior to such dividend, distribution or subdivision shall be proportionately reduced. If DSS, at any time or from time to time after the date of issuance of the Perpetual Convertible DSS Preferred Stock, combines (by combination, stock consolidation or otherwise) the common stock in the stock capital of DSS into a smaller number of common stock, the Conversion Price immediately prior to such combination shall be proportionately increased. Any adjustment shall be effective at the close of business on the date the dividend, subdivision or combination becomes effective.

(b) Adjustment to Conversion Price and Common Stock in the Stock Capital of DSS to be Allotted and Issued pursuant to the Exercise of the Right of Conversion of the Perpetual Convertible DSS Preferred Stock upon Reorganisation, Reclassification, Consolidation or Merger

In the event of any (i) capital reorganisation of DSS; (ii) reclassification of the securities in the stock capital of DSS (other than a change in par value, from par value to no par value, from no par value to par value or as a result of a dividend, subdivision or combination); (iii) consolidation or merger of DSS with or into another individual,

<sup>&</sup>lt;sup>3</sup> On 16 March 2020, the Company announced, *inter alia*, that the conversion price for the Perpetual Convertible DSS Preferred Stock was US\$0.216. Further to the announcement made by the Company on 16 March 2020, DSS completed a stock consolidation of every 30 existing common stock in the stock capital of DSS into one (1) consolidated common stock in the stock capital of DSS (the "**DSS Stock Consolidation**"). Following the DSS Stock Consolidation, the conversion price for the Perpetual Convertible DSS Preferred Stock was adjusted accordingly to US\$6.48.

corporation, partnership, joint venture, limited liability company, governmental authority, unincorporated organisation, trust, association or other entity ("Person"); (iv) sale of all or substantially all of DSS's assets to another Person; or (v) other similar transaction (other than any transaction covered by sub-paragraph (a) above), which entitles holders of common stock in the stock capital of DSS, in each case, to receive (either directly or upon subsequent liquidation) stock, securities or assets with respect to or in exchange for common stock in the stock capital of DSS, each Perpetual Convertible DSS Preferred Stock shall, immediately after such reorganisation, reclassification, consolidation, merger, sale or other similar transaction, remain outstanding and shall, in lieu of or in addition to (as the case may be) the common stock in the stock capital of DSS to be allotted and issued pursuant to the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock then, be exercisable for the kind and number of stock, securities or assets of DSS or of the successor Person resulting from such transaction to which Global BioMedical would have been entitled upon such reorganisation, reclassification, consolidation, merger, sale or other similar transaction if Global BioMedical had exercised its right of conversion of the Perpetual Convertible DSS Preferred Stock prior to such reorganisation, reclassification, consolidation, merger, sale or other similar transaction and had been allotted and issued the applicable number of common stock in the stock capital of DSS pursuant to the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock (without taking into account any limitations or restrictions on the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock, if any).

In such case, appropriate adjustment shall be made with respect to Global BioMedical's rights under the Certificate of Designation to ensure that the provisions of the Certificate of Designation relating to the Perpetual Convertible DSS Preferred Stock shall be applicable, as nearly as possible, to any stock, securities or assets acquirable by Global BioMedical upon conversion of the Perpetual Convertible DSS Preferred Stock into common stock in the stock capital of DSS (including, in the case of any consolidation, merger, sale or other similar transaction in which the successor Person is not DSS, an immediate adjustment to the Conversion Price to the value per common stock in the stock capital of DSS reflected by the terms of such consolidation, merger, sale or other similar transaction and a corresponding immediate adjustment to the number of common stock in the stock capital of DSS to be allotted and issued pursuant to the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock without taking into account any limitations or restrictions on the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock, if the value so reflected is less than the Conversion Price immediately prior to such consolidation, merger, sale or other similar transaction).

The provisions of this sub-paragraph (b) shall similarly apply to successive reorganisations, reclassifications, consolidations, mergers, sales or other similar transactions.

DSS shall not effect any such reorganisation, reclassification, consolidation, merger, sale or other similar transaction unless, prior to the consummation thereof, the successor Person (if not DSS) resulting from such reorganisation, reclassification, consolidation, merger, sale or other similar transaction shall assume, by written instrument substantially similar in form and substance to the Certificate of Designation, the obligation to deliver to Global BioMedical such stock, securities or assets which Global BioMedical shall be entitled to receive upon conversion of the Perpetual Convertible DSS Preferred Stock into common stock in the stock capital of DSS in accordance with the provisions of this sub-paragraph (b).

Notwithstanding anything to the contrary contained in the Certificate of Designation, with respect to any corporate event or other transaction contemplated by this sub-paragraph (b), Global BioMedical shall have the right to elect, prior to the consummation of such event or transaction, that DSS exercises its right of redemption as disclosed in **Section 2.8.1(f)** of this Circular (if applicable to such event or transaction) instead of giving effect to the provisions contained in this sub-paragraph (b).

#### (c) Other Events

If any event of the type contemplated by the provisions of the Certificate of Designation but not expressly provided for in the provisions of the Certificate of Designation (including the granting of stock appreciation rights, phantom stock rights or other rights with equity features) occurs, the board of directors of DSS shall make an appropriate adjustment to the Conversion Price and the number of common stock in the stock capital of DSS to be allotted and issued pursuant to the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock so as to protect Global BioMedical in a manner consistent with the provisions of the Certificate of Designation, provided that no adjustment shall increase the Conversion Price or decrease the number of common stock in the stock capital of DSS to be allotted and issued pursuant to the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock unless provided otherwise pursuant to the provisions of the Certificate of Designation.

- 2.8.3 The Conversion Price was arrived at arm's length basis, after taking into account, *inter alia*, the following:
  - (a) the closing price of the common stock in the stock capital of DSS on the New York Stock Exchange of US\$0.216³ on 2 March 2020, being the last full market day on which trades were done preceding the date the Term Sheet was proposed to the chief executive officer of DSS; and
  - (b) the prevailing economic conditions.
- 2.8.4 The Board believes that the Perpetual Convertible DSS Preferred Stock allows the Company to continue to capture the growth of Impact BioMedical in the near future through the appreciation in the common stock in the stock capital of DSS. The Perpetual Convertible DSS Preferred Stock are convertible securities of DSS. For illustration purposes and based on the assumption that:
  - (a) there is no Prescribed Conversion Limit; and
  - (b) Global BioMedical exercises its right of conversion for all 46,868 Perpetual Convertible DSS Preferred Stock at the Conversion Price of US\$6.48 and receives 7,232,716 common stock in the stock capital of DSS.

Global BioMedical will hold in aggregate 7,716,050 common stock in the stock capital of DSS, representing approximately 78.78% of the total issued and paid-up stock capital of DSS on an enlarged basis comprising 9,794,737 common stock as at the Latest Practicable Date. In other words, without the Prescribed Conversion Limit, the 483,334 New DSS Common Stock and the 46,868 Perpetual Convertible DSS Preferred Stock to be allotted and issued to Global BioMedical, taken together, represent a potential for Global BioMedical to own approximately 78.78% of the total issued and paid-up stock capital of DSS on an enlarged basis comprising 9,794,737 common stock as at the Latest Practicable Date.

2.8.5 For the aforementioned reasons, the Board is confident that notwithstanding the Prescribed Conversion Limit, the Company will be able to continue to capture the growth of Impact BioMedical in the near future by exercising the right of conversion of the Perpetual Convertible DSS Preferred Stock when the Conversion Price is at a discount to the then trading price of the common stock in the stock capital of DSS and selling the common stock in the stock capital of DSS allotted and issued to Global BioMedical pursuant to the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock. In doing so, the Company will receive a return of investment represented by the difference between the Conversion Price and the then trading price of the common stock in the stock capital of DSS. This return of investment is likely indirectly linked to the growth of Impact BioMedical in that the commercialisation of the assets held by Impact BioMedical has the potential to translate to an increase of the trading price of the common stock in the stock capital of DSS.

## 2.9 The Proposed US\$50 million Share Swap as an "Interested Person Transaction" under Chapter 9 of the Catalist Rules

2.9.1 <u>The Proposed US\$50 million Share Swap as an "Interested Person Transaction" under Chapter 9 of the Catalist Rules</u>

DSS is an associate of Mr Chan Heng Fai, who is a Director, the Chief Executive Officer and a controlling shareholder of the Company. Accordingly, DSS is an "interested person" under Chapter 9 of the Catalist Rules and the Proposed US\$50 million Share Swap is an "interested person transaction" under Chapter 9 of the Catalist Rules.

According to the announcement made by the Company on 16 March 2020, the Group's latest audited NTA then was approximately \$\$35.58 million based on the audited consolidated financial statements of the Group for FY2018.

The current total of all transactions (excluding transactions less than \$\$100,000) with Mr Chan Heng Fai and his associates for the period from 1 January 2020 to 31 December 2020 is set out in the table below.

	Before the Proposed US\$50 million Share Swap		After the Proposed US\$50 million Share Swa		
Description of Transaction	(S\$)	<b>(%)</b> <sup>(1)</sup>	(S\$)	(%) <sup>(1)</sup>	
Loan Facility from Mr Chan Heng Fai <sup>(2)</sup>	341,803	0.96	341,803	0.96	
Consultancy Agreement with Pop Motion Consulting Pte. Ltd. <sup>(3)</sup>	330,000	0.93	330,000	0.93	
Promissory Notes issued by AMRI to DSS <sup>(4)</sup>	71,555	0.20	71,555	0.20	
Proposed US\$50 million Share Swap	-	-	70,204,999	197.34	
Total	743,358	2.09	70,948,357	199.43	

#### Notes:

- (1) According to the announcement made by the Company on 16 March 2020, the percentage was calculated using the Group's latest audited NTA then of approximately S\$35.58 million based on audited consolidated financial statements of the Group for FY2018.
- (2) On 15 October 2018, the Company and Mr Chan Heng Fai entered into a loan agreement in relation to, *inter alia*, a loan facility of up to S\$14 million granted by Mr Chan Heng Fai to the Company (the "Loan Facility"). The Loan Facility is unsecured and the amount drawn down shall accrue interest at a rate of 6% per annum. S\$5.68 million has been drawn down by the Company and the accrued interest on the amount drawn down is approximately S\$1.20 million as at 16 March 2020. Assuming that no further amounts are drawn down by the Company between 16 March 2020 and 31 December 2020, the accrued interest on the amount drawn down by the Company for the period from 1 January 2020 to 31 December 2020 is S\$341,803.
  - Mr Chan Heng Fai is a Director, the Chief Executive Officer and a controlling shareholder of the Company. Accordingly, Mr Chan Heng Fai is an "interested person" under Chapter 9 of the Catalist Rules and the Loan Facility is an "interested person transaction" under Chapter 9 of the Catalist Rules.
- (3) On 27 August 2018, the Company and Pop Motion Consulting Pte. Ltd. entered into a consultancy agreement in relation to, *inter alia*, consultancy services provided Pop Motion Consulting Pte. Ltd. to the Company (the "Consultancy Agreement"). The Consultancy Agreement commenced on 1 September 2018 and the monthly consultancy fee payable to Pop Motion Consulting Pte. Ltd. is \$\$27,500. Accordingly, the aggregate consultancy fee payable for the period from 1 January 2020 to 31 December 2020 is \$\$330,000.
  - Mr Chan Tung Moe is a director and the sole shareholder of Pop Motion Consulting Pte. Ltd., and the son of Mr Chan Heng Fai. Pop Motion Consulting Pte. Ltd. therefore is an associate of Mr Chan Heng Fai, who is a Director, the Chief Executive Officer and a controlling shareholder of the Company. Accordingly, Pop Motion Consulting Pte. Ltd. is an "interested person" under Chapter 9 of the Catalist Rules and the Consultancy Agreement is an "interested person transaction" under Chapter 9 of the Catalist Rules.
- (4) American Medical REIT, Inc. ("AMRI") had, on 3 March 2020, issued 800,000 promissory notes with an aggregate principal amount of US\$800,000 (the "Promissory Notes") to DSS. The Promissory Notes shall accrue interest at a rate of 8% per annum which shall be payable on the day immediately preceding the first and second anniversary of the date of issuance of the Promissory Notes. AMRI has also granted DSS an option (the "Option") to subscribe for an additional 800,000 promissory notes (the "Additional Promissory Notes"). DSS may exercise the Option during a period commencing on the date of issuance of the Promissory Notes and ending on the date the aggregate principal amount of the Promissory Notes, together with all accrued interest, has been repaid in full by AMRI. The Additional Promissory Notes shall have the same terms and conditions as the Promissory Notes, except that the Additional Promissory Notes shall not entitle DSS to a similar option to subscribe for additional promissory notes. No Additional Promissory Notes have been issued by AMRI to DSS as at 16 March 2020. The accrued interest on the Promissory Notes for the period from 1 January 2020 to 31 December 2020 is S\$71,555.

AMRI is an indirect subsidiary of the Company. DSS is an associate of Mr Chan Heng Fai, who is a Director, the Chief Executive Officer and a controlling shareholder of the Company. Accordingly, DSS is an "interested person" under Chapter 9 of the Catalist Rules and the issue of Promissory Notes by AMRI is an "interested person transaction" under Chapter 9 of the Catalist Rules.

As the value of the Proposed US\$50 million Share Swap as an "interested person transaction" under Chapter 9 of the Catalist Rules is more than 5% of the Group's latest audited NTA as at 16 March 2020, the Proposed US\$50 million Share Swap is conditional upon approval by Shareholders at the EGM pursuant to Rule 906(1)(a) of the Catalist Rules.

#### 2.9.2 Opinion of the IFA

On 9 April 2020, the Company announced, *inter alia*, that the Company had, on 1 April 2020, appointed the IFA, W Capital Markets Pte. Ltd., as the independent financial adviser to opine on whether the Proposed US\$50 million Share Swap is on normal commercial terms and prejudicial to the interests of the Company and its minority Shareholders.

The IFA Letter issued by the IFA containing the opinion of the IFA on whether the Proposed US\$50 million Share Swap is on normal commercial terms and prejudicial to the interests of the Company and its minority Shareholders is set out in **Appendix B** to this Circular. The following is an extract from the IFA Letter and should be read by Shareholders in conjunction with, and in the context of, the full text of the IFA Letter. All capitalised terms used in the extract below shall have the meanings ascribed to them in the IFA Letter, unless the context requires otherwise or unless otherwise stated.

#### "6. OUR OPINION

In arriving at our opinion, we have taken into account the following key considerations which we consider to be pertinent to our assessment of the Proposed US\$50 million Share Swap:

- (a) the rationale for the Proposed US\$50 million Share Swap, details of which are set out in Section 5.1 of this IFA Letter;
- (b) assessment of the reasonableness of the Consideration, details of which are set out in Section 5.2 of this IFA Letter:
- (c) structure of the proposed disposal of Impact BioMedical, details of which are set out in Section 5.3 of this IFA Letter. In this regard, we noted that through the share swap, the Company will be able to continue to capture the growth of Impact BioMedical in the future when there is commercialisation of intellectual properties held by Impact BioMedical through price appreciation in DSS Shares, although it should be noted that the conversion of the Perpetual Convertible DSS Preferred Stock at any time will be subject to the Prescribed Conversion Limit;
- (d) DSS Share Issue Price and DSS Share Conversion Price of US\$6.48 is at a discount of 24.3%, 19.0% and 19.3% respectively to the VWAP of DSS Shares for the 1-month, 3-months and 6-months period prior to the Reference Date respectively; and
- (e) the financial effects of the Proposed US\$50 million Share Swap, details of which are set out in Section 5.4 of this IFA Letter, wherein it is noted that the proposed transaction is accretive to both the NTA and EPS of the Group on a proforma basis.

Having considered the foregoing considerations and based on information available to us as at the Latest Practicable Date, we are of the opinion that the Proposed US\$50 million Share Swap is on normal commercial terms and is not prejudicial to the interests of the Company and its minority Shareholders."

Shareholders are advised to read the IFA Letter set out in Appendix B to this Circular carefully.

#### 2.9.3 Statement by the Audit and Risk Management Committee

The members of the Audit and Risk Management Committee are considered independent for the purposes of the Proposed US\$50 million Share Swap.

The Audit and Risk Management Committee, having considered, *inter alia*, the rationale and information relating to the Proposed US\$50 million Share Swap as set out in **Section 2** of this Circular and the opinion of the IFA contained in the IFA Letter, concurs with the opinion of the IFA and is of the view that the Proposed US\$50 million Share Swap is on normal commercial terms and not prejudicial to the interests of the Company and its minority Shareholders.

#### 2.9.4 Abstention from Voting

Pursuant to Rule 921 of the Catalist Rules, the circular to shareholders must include a statement that the interested person will abstain, and has undertaken to ensure that its associates will abstain, from voting on the resolution approving the transaction.

Accordingly, DSS shall abstain, had undertaken to ensure that its associates shall abstain, from voting on the Ordinary Resolution relating to the Proposed US\$50 million Share Swap. DSS and its associates shall also refrain from accepting nominations as proxy or otherwise vote at the EGM in respect of the Ordinary Resolution relating to the Proposed US\$50 million Share Swap unless the relevant Proxy Forms contain specific instructions directing the manner in which the votes are to be cast.

In addition, Mr Chan Heng Fai shall voluntarily abstain, had undertaken to ensure that his associates shall voluntarily abstain from voting on the Ordinary Resolution relating to the Proposed US\$50 million Share Swap. Mr Chan Heng Fai and his associates shall also refrain from accepting nominations as proxy or otherwise vote at the EGM in respect of the Ordinary Resolution relating to the Proposed US\$50 million Share Swap unless the relevant Proxy Forms contain specific instructions directing the manner in which the votes are to be cast.

The Company will disregard any votes cast on the Ordinary Resolution relating to the Proposed US\$50 million Share Swap by DSS and its associates, and Mr Chan Heng Fai and his associates.

### 2.10 Relative Figures computed on the bases set out in Rule 1006 of the Catalist Rules relating to the Proposed US\$50 million Share Swap

2.10.1 The relative figures computed on the bases set out in Rule 1006 of the Catalist Rules for the Proposed US\$50 million Share Swap are as follows:

Rule 1006(a) of the Catalist Rules	The net asset value of the assets to be disposed of, compared with the Group's net asset value. This basis is not applicable to an acquisition of assets. (1)	(12.48)% <sup>(2)</sup>
Rule 1006(a) of the Catalist Rules	The net profits attributable to the assets acquired or disposed of, compared with the Group's net profits. <sup>(3)</sup>	6.32% <sup>(4)</sup>
Rule 1006(a) of the Catalist Rules	The aggregate value of the consideration given or received, compared with the Company's market capitalisation based on the total number of issued Shares excluding treasury shares.	201.06% <sup>(5)</sup>
Rule 1006(a) of the Catalist Rules	The number of equity securities issued by the Company as consideration for an acquisition, compared with the number of equity securities previously in issue.	Not Applicable <sup>(6)</sup>

Rule 1006(a) of the Catalist Rules	The aggregate volume or amount proved and probable reserves to be disposed of, compared with the aggregate of the Group's proved and probable reserves. This basis is applicable to a disposal of mineral, oil or gas assets by a mineral, oil or gas company, but not to an acquisition of such assets. If the reserves are not directly comparable,	Not Applicable <sup>(7)</sup>
	the SGX-ST may permit valuations to be used instead of volume or amount.	

#### Notes:

- (1) "Net assets" means total assets less total liabilities.
- (2) According to the announcement made by the Company on 16 March 2020, based on the unaudited consolidated financial statements of the Group for FY2019 (which was the latest announced consolidated financial statements of the Group then), the NLV represented by the Sale Shares was approximately S\$3.43 million as at 31 December 2019 which represents approximately (12.48)% of the Group's NAV of approximately S\$27.47 million as at 31 December 2019.
- (3) "Net profits" means profit or loss including discontinued operations that have not been disposed and before income tax and non-controlling interests.
- (4) According to the announcement made by the Company on 16 March 2020, based on the unaudited consolidated financial statements of the Group for FY2019 (which was the latest announced consolidated financial statements of the Group then), the net losses attributable to Impact BioMedical was approximately S\$0.70 million as at 31 December 2019 which represents approximately 6.32% of the Group's net losses of S\$11.07 million as at 31 December 2019.
- (5) The Consideration is US\$50 million (equivalent to S\$70.20 million based on an exchange rate as at 16 March 2020 of US\$1: S\$1.4041) which represents approximately 201.06% of the Company's market capitalisation of approximately S\$34.92 million on 11 March 2020, being the last full market day on which trades were done preceding the date of the Term Sheet. The Company's market capitalisation was determined by multiplying the number of Shares in issue (1,163,934,284 Shares) by the weighted average price of such Shares transacted on 11 March 2020 (S\$0.030).
- (6) No equity securities will be issued by the Company in connection with the Proposed US\$50 million Share Swap.
- (7) The Company is not a mineral, oil and gas company.
- 2.10.2 Based on the relative figures computed on the bases set out in Rule 1006 of the Catalist Rules, the Proposed US\$50 million Share Swap is classified as a "major transaction" under Chapter 10 of the Catalist Rules Manual. Accordingly, the Proposed US\$50 million Share Swap is conditional upon approval by Shareholders at the EGM.

#### 2.11 Financial Effects of the Proposed US\$50 million Share Swap

- 2.11.1 The financial effects of the Proposed US\$50 million Share Swap on the NTA per Share and the EPS of the Group have been prepared based on the audited consolidated financial statements of the Group for FY2019.
- 2.11.2 For the purpose of illustrating the financial effects, the financial effects of the Proposed US\$50 million Share Swap have been prepared based on, *inter alia*, the following assumptions:
  - (a) the financial effects on the NTA per Share of the Group are computed assuming that the Proposed US\$50 million Share Swap was completed on 31 December 2019:
  - (b) the financial effects on the EPS of the Group are computed assuming that the Proposed US\$50 million Share Swap was completed on 1 January 2019; and
  - (c) the costs and expenses incurred or to be incurred in connection with the Proposed US\$50 million Share Swap shall be disregarded.

#### 2.11.3 Financial Effects on the NTA per Share of the Group

	Before Completion of the Proposed US\$50 million Share Swap	After completion of the Proposed US\$50 million Share Swap
NTA (S\$'000)	24,929	97,393
Number of Shares in the issued and paid-up share capital of the Company, excluding treasury shares and subsidiary holdings ('000)	1,163,934	1,163,934
NTA per Share (Singapore cents)	2.14	8.37

#### 2.11.4 Financial Effects on the EPS of the Group

	Before Completion of the Proposed US\$50 million Share Swap	After completion of the Proposed US\$50 million Share Swap
Net Profit / (Net Loss) for FY2019 (S\$'000)	(13,640)	58,824
Weighted average number of Shares in the issued and paid-up share capital of the Company, excluding treasury shares and subsidiary holdings ('000)	1,103,875	1,103,875
EPS / (LPS) (Singapore cents)	(1.24)	5.33

2.11.5 The financial effects presented above are for illustrative purposes only and are not intended to reflect the actual future results and/or financial position of the Company and/or the Group upon completion of the Proposed US\$50 million Share Swap. No representation is made as to the actual future results and/or financial position of the Company and/or the Group.

#### 2.12 Service Contracts in connection with the Proposed US\$50 million Share Swap

No person is proposed to be appointed as a director of the Company in connection with the Proposed US\$50 million Share Swap and no service contracts in relation thereto is proposed to be entered into by the Company.

#### 2.13 Confirmation by the Company

The Company confirms that the Proposed US\$50 million Share Swap does not contravene any laws and regulations governing the Company and the Constitution of the Company.

#### 2.14 Details of Whitewash Waiver

#### 2.14.1 Introduction

According to an announcement made by the Company on 5 August 2016, the Securities Industry Council granted a waiver to the Concert Party group (as defined below) from the requirement to make a mandatory general offer for all Shares not already owned or controlled by the Concert Party Group, in the event an obligation to extend such an offer is incurred pursuant to Rule 14 of the Code (as defined below), as a result of, *inter alia*, the subscription of Rights Shares and the exercise of 2016 Warrants into new Shares subject to certain conditions, including the Concert Party Group complying or procuring the relevant person(s) to comply with the disclosure requirements set out in Note 2 on Section 2 of Appendix 1 of the Code.

Pursuant to Note 2 on Section 2 of Appendix 1 of the Code, details of any valid whitewash waiver must be disclosed or made available via public documents of the Company including circulars to Shareholders for as long as the 2016 Warrants issued pursuant to the whitewash waiver and held by the Concert Party Group and its concert parties remain outstanding.

For the avoidance of doubt, a whitewash waiver is not required in connection with the Proposed US\$50 million Share Swap.

#### 2.14.2 <u>Details of Whitewash Resolution</u>

On 24 October 2016, the Company allotted and issued 118,562,296 Rights Shares and 592,811,480 2016 Warrants to Mr Chan Heng Fai and Hengfai Business Development Pte. Ltd. (collectively, the "Concert Party Group") pursuant to the Rights cum Warrants Issue passed at an extraordinary general meeting of the Company held on 15 September 2016 and undertakings dated 19 August 2016 provided by Mr Chan Heng Fai and Hengfai Business Development Pte. Ltd. to the Company.

Prior to the allotment and issue of the Rights Shares and 2016 Warrants, Shareholders independent of the Concert Party Group had, at an extraordinary general meeting of the Company held on 15 September 2016, passed an ordinary resolution waiving their rights to receive a mandatory general offer from the Concert Party Group for all Shares not already owned or controlled by the Concert Party Group, in the event an obligation to extend such an offer is incurred pursuant to Rule 14 of the Singapore Code on Take-overs and Mergers (the "Code"), as a result of, *inter alia*, the subscription of Rights Shares and the exercise of 2016 Warrants into new Shares (the "Whitewash Resolution").

For the purposes of the Whitewash Resolution, the acquisition of Shares by the Concert Party Group upon exercise of the 2016 Warrants must be completed within five (5) years of the date of issue of the 2016 Warrants. Accordingly, the waiver pursuant to the Whitewash Resolution is valid from 24 October 2016 (being the date of the issue of the 2016 Warrants) to 24 October 2021 (being the date five (5) years from the date of issue of the 2016 Warrants). Further details of the Whitewash Resolution are set out in the Company's circular dated 31 August 2016.

#### 2.14.3 Holdings and Interests of the Concert Party Group and its Concert Parties

As at the Latest Practicable Date, the Concert Party Group, Liquidvalue Development Pte. Ltd. and Document Security Systems, Inc. hold or are interested in:

- (a) 864,995,323 Shares, representing approximately 72.82% of the total number of issued Shares:
- (b) 1,061,333 employee share options;
- (c) 403,839,653 2016 Warrants; and
- (d) 1,840,925,000 2017 Warrants.

Save as disclosed above, none of the Concert Party Group, Liquidvalue Development Pte. Ltd. and Document Security Systems, Inc. holds any voting rights in the Company and instruments convertible into, rights to subscribe for and options in respect of the Shares as at the Latest Practicable Date.

#### 2.14.4 Maximum Potential Interests of the Concert Party Group and its Concert Parties

The Concert Party Group, Liquidvalue Development Pte. Ltd. and Document Security Systems, Inc. would acquire a maximum potential interest of approximately 90.60% in the Company's enlarged share capital of 3,433,760,270, based on 1,187,934,284 issued Shares as at the Latest Practicable Date, assuming the Concert Party Group, Liquidvalue Development Pte. Ltd. and Document Security Systems, Inc. exercise the employee share options, the 2016 Warrants and the 2017 Warrants, and no other holders of instruments convertible into, rights to subscribe for and options in respect of the Shares exercise and convert such instruments, rights and options.

Pursuant to Rule 723 of the Catalist Rules, an issuer must ensure that at least 10% of the total number of issued shares (excluding preference shares, convertible equity securities and treasury shares) in a class that is listed is at all times held by the public. Shareholders should note that if the percentage of securities held in public hands falls below 10%, the SGX-ST may suspend trading of the class, or all securities of the issuer pursuant to Rule 724(1)(b) of the Catalist Rules.

#### 2.14.5 <u>Cautionary Statement</u>

Shareholders should note that, having approved the Whitewash Resolution, Shareholders have waived their rights to receive a general offer from the Concert Party Group, Liquidvalue Development Pte. Ltd. and Document Security Systems, Inc. at the highest price paid by the Concert Party Group, Liquidvalue Development Pte. Ltd. and Document Security Systems, Inc. for Shares in the past six (6) months preceding the commencement of the Rights cum Warrants Issue.

Shareholders should also note that, having approved the Whitewash Resolution, Shareholders could be forgoing the opportunity to receive a general offer from another person who may be discouraged from making a general offer in view of the potential dilution effect of the employee share options, the 2016 Warrants and the 2017 Warrants.

#### 3. CONSENTS

#### 3.1 Independent Valuer

The Independent Valuer has given and has not withdrawn its written consent to the issue of this Circular with the inclusion herein of its name, the Valuation Report as set out in **Appendix A** to this Circular and all references thereto in the form and context which they appear in this Circular.

#### 3.2 IFA

The IFA has given and has not withdrawn its written consent to the issue of this Circular with the inclusion herein of its name, the IFA Letter as set out in **Appendix B** to this Circular and all references thereto in the form and context which they appear in this Circular.

#### 4. DIRECTORS' AND SUBSTANTIAL SHAREHOLDERS' INTERESTS

The interests of the Directors and the Substantial Shareholders in the Shares as at the Latest Practicable Date are set out below:

	Direct Interest		Deemed interest		Total interest	
	Number of Shares	% <sup>(1)</sup>	Number of Shares	% <sup>(1)</sup>	Number of Shares	% <sup>(1)</sup>
Directors						
Chan Heng Fai <sup>(2)</sup>	14,135,400	1.19%	850,859,923	71.63%	864,995,323	72.82%
Lam Lee G.	-	-	-	-	-	-
Tao Yeoh Chi	-	-	-	-	-	-
Wong Tat Keung	-	-	-	-	-	-
Chan King Fai	-	-	-	-	-	-
Wong Shui Yeung	-	-	-	-	-	-
Substantial Shareholders (other than Directors)						
Hengfai Business Development Pte. Ltd.	761,150,294	64.07%	-	-	761,150,294	64.07%
Document Security Systems, Inc.	83,174,129	7.00%	-	-	83,174,129	7.00%

#### Notes:

- (1) Based on 1,187,934,284 Shares in the issued and paid-up share capital of the Company, excluding treasury shares and subsidiary holdings, as at the Latest Practicable Date.
- (2) Hengfai Business Development Pte. Ltd., Liquidvalue Development Pte. Ltd. and Document Security Systems, Inc. hold 761,150,294, 6,535,500 and 83,174,129 Shares in the issued and paid-up share capital of the Company respectively. Mr Chan Heng Fai is deemed to have an interest in the Shares held by Hengfai Business Development Pte. Ltd., Liquidvalue Development Pte. Ltd. and Document Security Systems, Inc..

Save as disclosed in this Circular, none of the Directors and/or the Substantial Shareholders have any interest, direct or indirect, in the Proposed US\$50 million Share Swap, other than through their respective shareholdings in the Company, if any.

#### 5. DIRECTORS' RECOMMENDATION

Having considered, *inter alia*, (a) the rationale and information relating to the Proposed US\$50 million Share Swap as set out in **Section 2** of this Circular; and (b) the Audit and Risk Management Committee's view that the Proposed US\$50 million Share Swap is on normal commercial terms and not prejudicial to the interests of the Company and its minority Shareholders as set out in **Section 2.9.3** of this Circular, the Board (excluding Mr Chan Heng Fai) is of the opinion that the Proposed US\$50 million Share Swap is in the best interests of the Company. Accordingly, the Board (excluding Mr Chan Heng Fai) recommends that Shareholders vote in favour of the Ordinary Resolution relating to the Proposed US\$50 million Share Swap at the EGM.

#### 6. DIRECTORS' RESPONSIBILITY STATEMENT

The Directors collectively and individually accept full responsibility for the accuracy of the information given in this Circular and confirm after making all reasonable enquiries that, to the best of their knowledge and belief, this Circular constitutes full and true disclosure of all material facts about the Proposed US\$50 million Share Swap, the Company and its subsidiaries, and the Directors are not aware of any facts the omission of which would make any statement in this Circular misleading. Where information in this Circular has been extracted from published or otherwise publicly available sources or obtained from a named source, the sole responsibility of the Directors has been to ensure that such information has been accurately and correctly extracted from those sources and/or reproduced in this Circular in its proper form and context.

#### 7. EXTRAORDINARY GENERAL MEETING

The EGM, notice of which is set out on page N-1 of this Circular, will be held by way of electronic means on the date and at the time as set out in the Notice of EGM for the purpose of considering and if thought fit, passing, with or without any modification, the Ordinary Resolution relating to the Proposed US\$50 million Share Swap as set out in the Notice of EGM.

#### 8. ACTION TO BE TAKEN BY SHAREHOLDERS

#### 8.1 Date, Time and Conduct of EGM

Pursuant to the COVID-19 (Temporary Measures) (Alternative Arrangements for Meetings for Companies, Variable Capital Companies, Business Trusts, Unit Trusts and Debenture Holders) Order 2020, the EGM will be held by way of electronic means on 26 June 2020 at 11.30 a.m. (Singapore Time) or as soon as practicable immediately following the conclusion or adjournment of the Annual General Meeting of the Company to be held on the same day at 10.30 a.m. (Singapore Time) for the purpose of considering and if thought fit, passing, with or without any modification, the Ordinary Resolution relating to the Proposed US\$50 million Share Swap.

#### 8.2 Notice of EGM, Circular and Proxy Form

Printed copies of the Notice of EGM, this Circular and the Proxy Form will not be sent to Shareholders. Instead, the Notice of EGM, this Circular and the Proxy Form may be accessed at the Company's website at the URL <a href="http://sed.com.sg/notice-of-egm-the-circular-and-the-proxy-form-2">http://sed.com.sg/notice-of-egm-the-circular-and-the-proxy-form-2</a> by clicking on the hyperlinks titled "EGM June 2020 Notice", "EGM June 2020 Circular" and "EGM June 2020 Proxy Form" respectively. The Notice of EGM, this Circular and the Proxy Form are also available on SGXNET at the URL <a href="https://www.sgx.com/securities/company-announcements">https://www.sgx.com/securities/company-announcements</a>.

#### 8.3 Attendance at the EGM

Due to the current COVID-19 restriction orders in Singapore, **Shareholders will not be able to attend the EGM in person**.

#### 8.4 Participation at the EGM

- 8.4.1 Alternative arrangements have been made by the Company to allow Shareholders to participate at the EGM via electronic means. Such alternative arrangements include:
  - (a) arrangements by which Shareholders may electronically access the EGM proceedings and observe and/or listen to the live audio-visual webcast or live audio-only stream;
  - (b) arrangements by which Shareholders may submit comments, queries and/or questions to the chairman of the EGM (the "Chairman of the Meeting") in advance of the EGM;
  - (c) arrangements by which the Board and the management may address substantial and relevant comments, queries and/or questions before the EGM; and
  - (d) arrangements by which Shareholders may appoint the Chairman of the Meeting as his/her/its proxy to attend, speak and vote on his/her/its behalf at the EGM.
- 8.4.2 Details of the steps for pre-registration for the live audio-visual webcast or live audio-only stream, submission of comments, queries and/or questions in advance of the EGM and submission of Proxy Forms to appoint the Chairman of the Meeting to attend, speak and vote at the EGM are set out in the **Appendix C** to this Circular.

#### 8.5 Key Dates and Times

Key Dates and Times	Actions to be taken by Shareholders
6.00 p.m. on	Deadline for Shareholders to:
Thursday, 18 June 2020	(a) pre-register for the live audio-visual webcast or live audio-only stream; and
	(b) submit comments, queries and/or questions in advance of the EGM.
11.30 a.m. on Tuesday, 23 June 2020	Deadline for Shareholders to submit Proxy Forms to appoint the Chairman of the Meeting to attend, speak and vote at the EGM.
12.00 p.m. on Thursday, 25 June 2020	Shareholders, who have pre-registered for the live audio-visual webcast or live audio-only stream and who have been verified by the Company's Share Registrar, Boardroom Corporate & Advisory Services Pte. Ltd., will receive an email which will contain the user ID and password details as well as the URL to access the live audio-visual webcast or the toll-free telephone number to access the live audio-only stream (the "Confirmation Email").
	Shareholders, who have pre-registered for the live audio-visual webcast or live audio-only stream but who have not received the Confirmation Email by 12.00 p.m. on Thursday, 25 June 2020, should contact the Company at <a href="mailto:sedegm2020.2@sed.com.sg">sedegm2020.2@sed.com.sg</a> .

Key Dates and Times	Actions to be taken by Shareholders
11.30 a.m. on Friday, 26 June 2020	Shareholders may participate at the EGM via electronic means by:
	(a) accessing the URL in the Confirmation Email and entering the user ID and password to access the live audio-visual webcast; or
	(b) calling the toll-free telephone number to access the live audio-only stream.

#### 8.6 Important Reminder

Due to the constantly evolving COVID-19 situation in Singapore, the Company may be required to change the arrangements for the EGM at short notice. For the latest updates on the arrangements for the EGM, Shareholders should check the Company's website at the URL <a href="http://sed.com.sg/updates-on-arrangements-for-the-egm-2">http://sed.com.sg/updates-on-arrangements-for-the-egm-2</a>. Such updates will also be made available on SGXNET at the URL <a href="https://www.sgx.com/securities/company-announcements">https://www.sgx.com/securities/company-announcements</a>.

#### 9. DOCUMENTS AVAILABLE FOR INSPECTION

Copies of the following documents may be inspected at the registered office of the Company located at 7 Temasek Boulevard #29-01B Suntec Tower One Singapore 038987 during normal business hours for three (3) months from the date of this Circular:

- (a) the Term Sheet;
- (b) the Share Exchange Agreement;
- (c) the Valuation Report;
- (d) the letter of consent dated 4 June 2020 from the Independent Valuer;
- (e) the letter of consent dated 4 June 2020 from the IFA;
- (f) the Constitution of the Company;
- (g) the annual report of the Company for FY2018; and
- (h) the annual report of the Company for FY2019.

Yours faithfully, For and on behalf of the Board of Directors of Singapore eDevelopment Limited

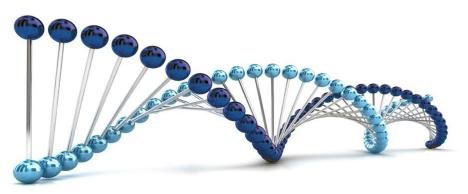
Chan Heng Fai

Executive Chairman, Executive Director and Chief Executive Officer

# APPENDIX A VALUATION REPORT







**Asset Portfolio Valuation** 

Prepared By: Destum Partners, Inc.



# Strictly Confidential



### **Strictly Confidential**

This Report has been prepared by Destum Partners, Inc. and is intended for Document Security Systems, Inc. (DSS) and is created for the use and benefit Document Security Systems, Inc. (DSS) only ("the Company").

The material in this Report is based upon information obtained by Destum Partners, Inc. from sources it deems to be reliable. Neither the Company nor Destum Partners, nor any of their respective partners, directors, officers, employees or agents, makes any representation or warranty, expressed or implied, as to the accuracy or completeness of this Report or any of its contents, and no legal commitments or obligations shall arise by reason of this Report or its contents.

In this Report, certain documents and other material are described in summary form. The summaries do not purport to be complete nor necessarily, accurate descriptions of the full agreements involved, nor do they purport to constitute a legal analysis of the provisions of the documents. Photocopying or other duplication of this document is prohibited. This Report shall not constitute an indication that there has been a change in the business or affairs of the Company since the date of its preparation.

# **Executive Summary**







Destum Partners completed a valuation based on industry accepted methodologies on the assets held by Impact Biomedical

#### **OBJECTIVE**

 Destum Partners was hired by Document Security Services (DSS) to complete an independent valuation of the assets held by Impact Biomedical

#### **SCOPE**

- Four distinct assets were valued to include:
  - Linebacker Series for Parkinson's Disease, Huntington's Disease, Respiratory Syncicial Virus, and COVID-19
  - Laetose (Smart Sugar)
  - 3F as a mosquito avoidant, and as an anti-microbial
  - Equivir for COVID-19 and Influenza

#### **METHODOLOGY**

- Destum Partners used a number of valuation methodologies to complete the valuation, with the relevant methodology matched to the specific asset. We used the following:
- Risk adjusted net present value (rNPV)
- Market and transaction comparables
- Sales multiples
- Discounted cash flow (DCF) with perpetuity







Based on the Valuation completed by Destum Partners, the value of Impact Biomedical is \$382M

Destum Partners valued 4 distinct assets with Impact Biomedical's respective ownership interest

Asset	Application (click to be directed)	Value	Impact Share	Adjusted Value
	Parkinson's Disease (1)	\$243M	63.64%	\$154.6M
Linebacker 1 & 2	Huntington's Disease (1)	\$19M	63.64%	\$12.1M
	<u>RSV (2)</u>	\$84M	63.64%	\$53.5M
	COVID-19 (2)	\$72M	63.64%	\$45.8M
Laetose	Smart Sugar	\$31M	81.82%	\$25.4M
3F	Mosquito + Anti- microbial	\$64M	63.64%	\$40.7M
Faccion	COVID-19	\$72M	63.64%	\$45.8M
Equivir	<u>Influenza</u>	\$6.5M	63.64%	\$4.1M
TOTAL		\$592M		\$382M

## **Project Overview**







### Provide an independent valuation of Assets currently Held by Impact Biomedical

- Document Security Systems (DSS), has retained the valuation services of Destum Partners
- The scope of services are to independently value the assets currently held by Impact Biomedical
- Impact Biomedical is a privately held company with assets generally focused in healthcare and consumer products
- Destum Partners specifically valued the following assets and applications where Impact Biomedical has an ownership interest:
  - Linebacker (Small Molecule derivative of Myricetin) for:
    - Parkinson's Disease
    - Huntington's Disease
    - Respiratory Syncytial Virus (RSV)
    - COVID-19 Intervention
  - Laetose (A Smarter Sugar)
  - 3F (Combination of bioactives isolated from natural sources and recombined)
    - Mosquito Avoidance
    - Anti-microbial consumer applications
  - Equivir (Modified Flavinoid)
    - COVID-19 intervention
    - Influenza intervention







### Provide an independent valuation of Assets currently Held by Impact Biomedical

- Impact Biomedical owns certain percentages of each of the assets, and therefore valuations require adjustment
- Provide DSS with a combined asset adjusted valuation based on Impact Biomedicals ownership interests in the outlined assets



## Methodology



Destum Partners used a variety of industry accepted valuation methodologies to accurately capture the value of the assets held by Impact Biomedical

#### LINEBACKER:

- 1. Regulated as a drug
- Industry standard methodology of an rNPV (Risk Adjusted Net Present Value) was utilized for Parkinson's Disease, Huntington's Disease, and RSV
  - Ideally suited to value drugs as it allows one to clearly separate clinical and regulatory risk from market and company risk
  - b. Industry accepted by pharma, biotech and investors
- COVID-19: Destum Partners adopted a market comparables based methodology, by computing the value increase experienced by comparable companies pre and post announcement of COVID-19 activities

#### LAETOSE:

- 1. Patent Pending
- Industry standard DCF with perpetuity was used in combination with a multiples analysis leveraging both EV/Sales and EV/EBITDA ratios in order to establish an approximate valuation range
  - a. Value derived from discounted cash flow and multiples methodologies were based off relevant industry benchmarks for sales

#### 3F:

- 1. Potential need to register as pesticide with EPA
- Industry standard DCF with perpetuity was used in combination with a multiples analysis leveraging both EV/Sales and EV/EBITDA ratios in order to establish an approximate valuation range
  - a. Value derived from discounted cash flow and multiples methodologies were based off relevant industry benchmarks for sales

#### **EQUIVIR:**

- 1. Regulated as a drug
- 2. A distinct methodology was used for each indication
  - a. COVID-19: Destum Partners adopted a market comparables based methodology, by computing the value increase experienced by comparable companies pre and post announcement of COVID-19 activities
  - b. Influenza: The rNPV methodology was utilized

## Linebacker 1 & 2



## Linebacker Valuation



#### **PROJECT OBJECTIVES & SCOPE**

- Conduct a global valuation exercise for Linebacker 1 and 2 as a therapeutic intervention for the treatment of Parkinson's Disease, Huntington's Disease, RSV and COVID-19
- Territories: Global
- Indication(s): Linebacker 1: Parkinson's Disease, Huntington's Disease, Linebacker 2: RSV
- Output(s):
  - rNPV for an orally available Parkinson's, Huntington's and RSV intervention
  - Value attributed to developing and commercializing a vaccine or treatment for COVID-19

### **PROJECT METHODOLOGY & RATIONALE (COVID-19)**

- Due to the scarcity of reliable information typically used in intrinsic valuations (DCF) and the constantly evolving understanding of the disease, Destum has chosen to rely on publicly traded comparables in order to most accurately identify the value associated with developing a treatment for COVID-19
- To do this, Destum compared the market capitalization of companies prior to announcing a COVID-19
  initiative to their market cap afterwards, isolating the value investors attribute to a potential treatment
- To account for large swings in the stock price in the days following an announcement, a 5-day volume weighted average price (VWAP) was leveraged in an effort to capture the true value change, absent of any emotional or speculative trading that may unrealistically influence results

### Linebacker 1 – Parkinson's Disease



## Parkinson's Overview



### Parkinson's is a devastating, neurodegenerative disease affecting millions worldwide

- Parkinson's disease (PD) is a neurodegenerative disorder that affects predominately dopamine-producing ("dopaminergic") neurons<sup>1</sup>
- Although the cause remains largely unknown, symptoms generally develop slowly over years and can include: tremors, slowness of movement, limb rigidity and balance problems<sup>1</sup>
- Approximately 1 million Americans are currently living with PD<sup>2</sup>
  - The mean age of onset is typically around 60 years, while cases in individuals under 40 are rare<sup>2</sup>
- Approximately 100,000 patients will be diagnosed with PD in the US in 2017, with numbers expected to grow significantly due to an aging population<sup>2</sup>
- In Europe, it is estimated that 1.25 million people are living with PD<sup>2</sup>
  - Incidence in Europe reflects that of the US with around 100,000 new cases annually<sup>2</sup>
- While disease progression varies from patient to patient, it is estimated that the progression time of symptoms to a stage of high dependency from caregivers may range from 8 to 15 years.<sup>2</sup>



## Parkinson's Current Market Size

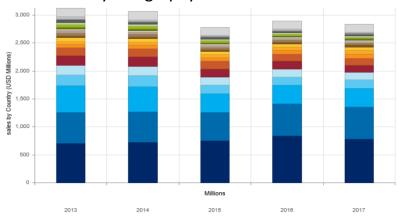


The Parkinson's global market was approximately \$3B and relatively constant, with the US market representing approximately 25% of the global market

#### Global Sales by Brand<sup>1</sup>

International Product Name	Molecule	Corporation	2013	2014	2015	2016	2017	Change
Total			3,121	3,067	2,779	2,891	2,836	-285
NEUPRO	ROTIGOTINE	UCB +32	183	247	281	345	328	145
STALEVO	LEVODOPA +2	NOVARTIS +26	359	300	222	191	167	-192
AZILECT	RASAGILINE	TEVA +25	500	556	535	476	166	-334
MADOPAR	LEVODOPA +1	ROCHE +26	167	160	140	150	165	-2
DUODOPA	LEVODOPA +1	ABBVIE +1	117	114	113	134	155	37
SIFROL	PRAMIPEXOLE	BOEHRINGER INGELHEIM +21	336	271	185	160	134	-202
NORTHERA	DROXIDOPA	LUNDBECK	-	-	-	-	132	132
LEMDOPA	LEVODOPA +1	AMNEAL PHARM +1	0	0	38	75	104	104
REQUIP	ROPINIROLE	GLAXOSMITHKLINE +15	146	139	110	112	101	-45
SINEMET	LEVODOPA +1	MERCK & CO +19	114	107	91	90	89	-25
RASAGILINE TEVA	RASAGILINE	TEVA	-	-	6	12	72	72
NOURIAST @ JAPAN	ISTRADEFYLLINE	KYOWA HAKKO KIRIN	4	22	35	52	64	60
FP @ JAPAN	SELEGILINE	FUJIMOTO	74	66	53	54	58	-16
RASAGILINE ALVO	RASAGILINE	ALVOGEN	-	-	-	-	47	47
COMTAN	ENTACAPONE	NOVARTIS +7	101	88	65	56	47	-54
CARBIDOP/LEVO TEVA	LEVODOPA +1	TEVA	40	39	38	37	37	-4
EXCEGRAN	ZONISAMIDE	SUMITOMO DAINIPPON +2	19	21	20	31	35	17
XADAGO	SAFINAMIDE	ZAMBON +4	-	-	5	21	34	34
CARBIDOP/LEVO MAYN	LEVODOPA +1	MAYNE PHARMA GROUP +1	27	23	27	26	33	6
CARBIDOP/LEVO MYLA	LEVODOPA +1	MYLAN	28	15	22	24	23	-6
OTHERS			906	897	791	843	846	-59

### Global Sales by Geography<sup>1</sup>



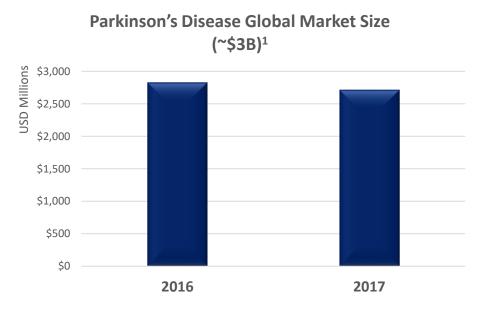
- There has been little to no innovation in disease modifying agents for Parkinson's
- The global Parkinson's disease market has been stagnant not only due to limited innovation but also due to loss of IP of key drugs in particular Azilect
- The Seven major markets
   (7MM) account for nearly 80%
   of the global market, with the
   US, Japan and Germany
   representing the three largest
   markets

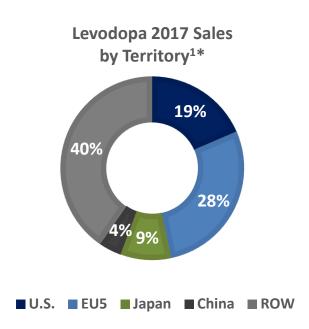


## Parkinson's Current Market Size



In 2017, the global Parkinson's Disease market was ~\$3 billion1 and is expected to increase to ~\$5.7B by 20222





- Main market drivers include the growth of the aging population, an increase in the prevalence of Parkinson's Disease, and increases in government funding for research<sup>2</sup>
- Levodopa sales account for ~1/3 of the market, with global sales reaching ~\$1.3 billion in 2017¹
- The U.S. accounts for 19% of levodopa sales, while the EU5 (UK, Germany, France, Italy and Spain) account for 28%, Japan accounts for 9%, and China accounts for 4%<sup>1</sup>

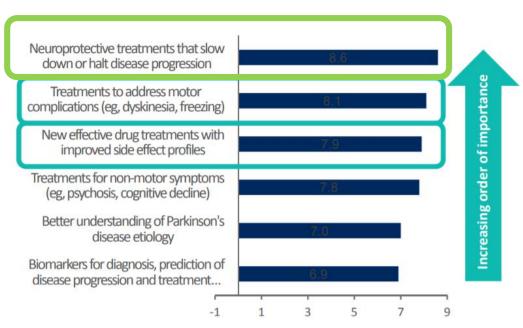


# Parkinson's Unmet Medical Need



Linebacker could be well positioned to fill a major unmet medical need with an oral disease modifying agent

### Survey Unmet Needs in Parkinson's Disease<sup>1</sup>



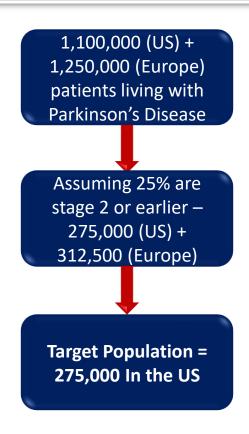
- There exists a significant unmet medical need for Parkinson's Disease Patients
- While improvements on existing treatments, and improvements to address motor complications is important, the greatest unmet medical need exists for a therapeutic intervention that slows or halts the progression of disease
- Patients in early stages of the disease are ideal candidates for such an intervention that halts or slows progression







Linebacker will be positioned to treat those with Stage II PD or earlier in combination with existing therapies



	Early PD		Mid-stage PD	Advand	ced PD
Stage of Parkinson's Disease	1	2	3	4	5
Severity of Symptoms	MILD Symptoms of PD are mild and only seen on one side of the body (unilateral involvement)	MILD Symptoms of PD on both sides of the body (bilateral involvement) or at the midline	MODERATE Symptoms of PD are characterized by loss of balance and slowness of movement	SEVERE Symptoms of PD are severely disabling	SEVERE Symptoms of PD are severe and are characterized by an inability to rise
	SYMPTOMS Tremor of one hand Rigidity Clumsy Leg One side of the face may be affected, impacting the expression	SYMPTOMS Loss of facial expression on both sides Decreased blinking Speech abnormalities Rigidity of the muscles in the trunk	Balance is compromised Inability to make the rapid, automatic and involuntary adjustments All other symptoms of PD are present	SYMPTOMS Patients may be able to walk and stand unassisted, but they are noticeably incapacitated Patient is unable to live an independent life and needs	Patients fall when standing or turning May freeze or stumble when walking Hallucinations or delusions.

\*75% of randomly selected patients scored as stage 2 or higher<sup>2</sup>

<sup>(1)</sup> Stages of Parkinson's. Parkinson's Disease.net

<sup>2)</sup> Mov Disord. 2005 Sep; 20: 1133–1142.







### All current therapeutic options for are only approved for symptomatic relief

- There are no disease modifying therapeutic options to stop or slow progression of PD only to provide symptomatic relief
- Many new drugs aim to delay or improve the use of levodopa, the long term standard of care, as studies have shown prolonged use can yield diminishing benefit and even more pronounced side effects
- Recent FDA approved drugs for PD include:

Product	Target/MOA	Indication	Approval Year
Nourianz (Kyowa Kirin) Istradefylline	Adenosine Receptor Antagonist	Adjuvant to decrease off episodes	2019
Inbrija (Accorda) Inhaled Levadopa	Dopamine Agonist	PD	2018
Xadago (Newron) safinamide	MOA-B inhibitor	Add-on for carbidopa/levodopa	2017
Duopa (AbbVie) carbidopa/levodopa	Dopamine agonist  AADC inhibitor	PD	2015
Rytary (Impax) carbidopa/levodopa	Dopamine agonist  AADC inhibitor	PD	2015
Azilect (Teva) rasagiline	MOA-B inhibitor	PD	2006
Zelapar (Valeant) selegiline hydrochloride	MOA-B inhibitor	PD	2006
Stalevo (Novartis) rasagcarbidopa/levodopa/ entacaponeiline	MT inhibitor Dopamine agonist AADC inhibitor	PD	2003







Drug Name (Sponsor)	Indication	Phase of Development	Patients Enrolled	Trial Duration
Ongentys (Bial) COMT inhibitor	PD w/ levadopa	Filed (phase 3) NCT01227655	427	1.5
Inbrija (Acorda) dopamine agonist	PD w/ OFF periods	Filed (phase 3) NCT02240030	351	2
CD/LD-GR (Intec Pharmaceuticals) dopamine agonist	Advanced PD	Phase 3 NCT02605434	323	2.5
APL-130277 (Sunovion) dopamine agonist	PD w/ levadopa	Phase 3 NCT02469090	219	2.5
P2B001 (Pharma Two B) MAO-B inhibitor	Early PD	Phase 3 NCT03329508	525	1
Apomorphine hydrochloride (Britannia Pharma) dopamine agonist	Advanced PD	Phase 3 NCT02006121	107	4
ME2125 (Eisai) MAO-B inhibitor	Early PD	Phase 2/3 JapicCTI-153056	410	4
PF-06649751 (Pfizer)	Early PD	Phase 2 NCT02847650	57	1.5
dopamine agonist	PD w/ motor fluctuations	Phase 2 NCT02687542	107	1.5
BIIB054 (Biogen) anit-alpha-synuclein anitbody	PD	Phase 2 NCT03318523	311	1.5







Drug Name (Sponsor)	Indication	Phase of Development	Patients Enrolled	Trial Duration
KW-6356 (Kyowa Hakko Kirin) adenosine A2a antagonist	Early PD	Phase 2 NCT02939391	150	2
RO7046015/PRX002 (Roche) anit-alpha-synuclein	Early PD	Phase 2 NCT03100149	300	4
Foliglurax (Prexton) mGluR4	PD w/ levadopa	Phase 2 NCT03162874	165	1.5
Stalevo (Orion) COMT inhibitor	PD w/ OFF periods	Phase 2 NCT02764125	80	2
EPI-589 (Edison) Biomarker	PD	Phase 2 NCT02462603	40	2.5
Deferiprone (ApoPharma) oral iron chelator	Early PD	Phase 2 NCT02728843	140	2
ITI-214 (Intracellular Therapies) PDE1 inhibitor	PD	Phase 1/2 NCT03257046	24	1
VY-AADC01 (Voyager) COMT inhibitor	Advanced PD	Phase 1 NCT03065192	16	3.5
ABBV-951 (AbbVie) Dopamine agonist/AADC inhibitor	PD	Phase 1 NCT03033498	24	1
MEDI1341 (AstraZeneca) alpha-synuclein antibody	PD (HV)	Phase 1 NCT03272165	40	1
ISC-hpNSC (Cyto Therapeutics) neural stem cells	PD	Phase 1 NCT02452723	12	3







Linebacker offer the potential of an oral, safe and effective treatment for patients with mild or early Parkinson's Disease

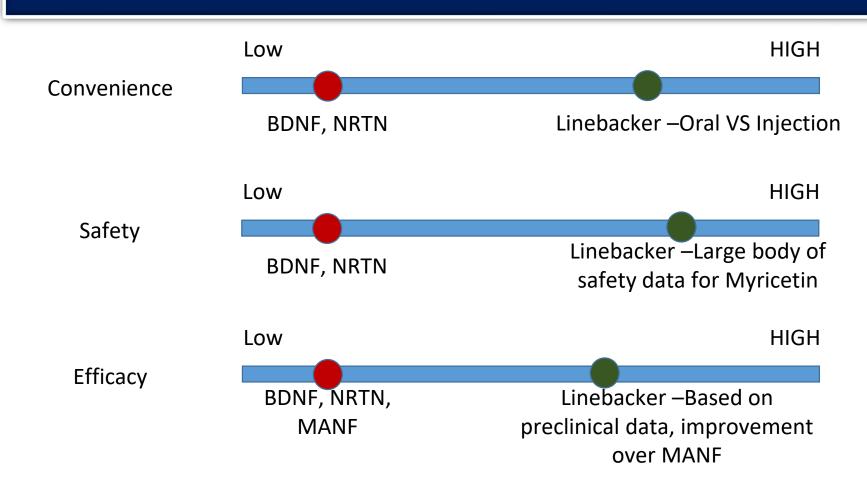
Category	Detail
Route of Administration	Orally bioavailable small molecule, with potential for once a day oral dosing
Mechanism of Action	Multimodal mechanism of action: anti-TNF $\!\alpha$ and activity against many associated CNS causes.
Primary Indication (Positioning)	Parkinson's Disease
Follow On Indications	Huntington's Disease, Stroke, Depression, Memory Deficits, and Cerebral Brain Injury
Safety	Strong safety profile supported by the extensive use of myricetin and Maximum Tolerated Dose study of LB-1
Efficacy	Slow or halt progression of disease in mild PD patients Measured by a reduction in the UPDRS Scores



# Positioning



Linebacker is differentiated and uniquely positioned based on convenience, safety, and efficacy









We anticipate drug approval in 2027, with a total spend of \$42M spread out over a six (6) year period



- For Clinical Studies we have assumed \$75K per patient
- Sample sizes are: Phase I: 25 Patients, Phase II: 75 Patients, Phase III: 200
- This development plan is for the US ONLY



# **Drug Pricing**



### The annual price of Linebacker is benchmarked off recently approved PD drugs

Drug	Unit WAC Price	Annual WAC Price
Inbrija (Inhaled Levadopa)	\$950 (Pack of 60's)- 2WKS	\$24,700
Nourianz (istradefylline)	\$4,500 (90's) – 3 Months	\$18,000
	Average	\$21,350

- While Inbrija is a reformulation and Nourianz is focused on symptomatic relief, and neither drug are disease modifying, we recommend adopting an average of the two annual prices
- As a result, the annual price for Linebacker will be \$21,350 annually or \$1,779 monthly
- We would also apply a standard 3% annual price increase for the drug



## Revenue Forecast



### Destum Partners utilized the following forecast assumptions for Linebacker:

	Destum Assumption	Rationale/Source
Forecast Period	2027 – 2036 (10 years)	Destum utilized a 10 year forecast to show revenue projections as the company will rely on IP that expires in H2 2036
Patient Population	275,000 early PD patients in the U.S. in 2019 (3% annual growth rate)	Source: Kyowa Kirin, Mov Disord. 2005 Sep; 20: 1133–1142
IP/Exclusivity	IP/exclusivity through 2036	issued patent #10,123,991, PTC filed for Rest of World (ROW)
Market Share	30% peak patient share, 4 years post launch (2030)	Destum assumes a 30% patient share due to the underlying focus on treating the disease, with limited competition, but know limitations with compliance
Adherence	65%	Industry standard for CNS
Annual WAC price	\$21,350 (growing at 3% inflation)	Based on the target product profile, Destum assumes that Linebacker will conservatively secure comparable pricing to recently approved drugs
Gross to Net Calculation	70% of Sales	Industry standard







### Destum Partners utilized the following forecast assumptions for Linebacker:

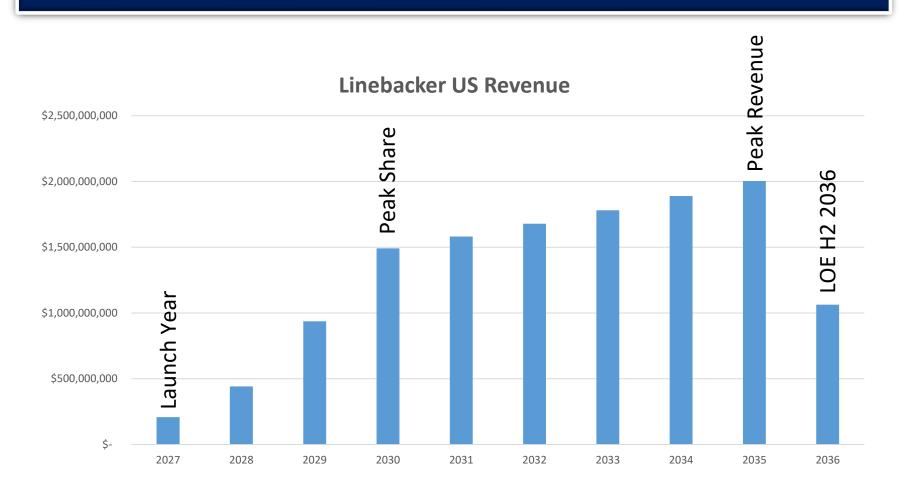
	2027	2028	2029	2030	2031	2032	2033	2034	2035	H1 2036
Mild PD- Patients	348,362	358,813	369,577	380,664	392,084	403,847	415,962	428,441	441,294	454,533
Linebacker Patient Share	5%	10%	20%	30%	30%	30%	30%	30%	30%	30%
Adherence Rate	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%
Linebacker Treated Patients	11,322	23,323	48,045	74,230	76,456	78,750	81,113	83,546	86,052	44,317
Annual WAC per Patient (3% inflation)	\$ 26,258	\$ 27,046	\$27,857	\$ 28,693	\$ 29,553	\$ 30,440	\$ 31,353	\$ 32,294	\$ 33,263	\$ 34,260
Linebacker U.S. Gross Revenue	\$ 297 M	\$ 631 M	\$ 1,34B	\$ 2,13B	\$ 2,26B	\$ 2,4B	\$ 2,54B	\$ 2,7B	\$ 2,86B	\$ 1,5B
Linebacker U.S. Net Revenue (70%)	\$ 208M	\$ 442M	\$ 937M	\$ 1,49B	\$ 1,58B	\$ 1,68B	\$ 1,78B	\$ 1,89B	\$ 2B	\$ 1B







### Destum Partners peak patient share in 2030 with US revenue of \$1.49 billion





## **Probabilities of Success**



### 8.4% probability of approval based on the current stage of development

Event	Single Event Likelihood of Success	Cumulative Likelihood of Success*
Pre-Clinical	95%	8.4%
Phase 1	60%	8.8%
Phase 2	30%	15%
Phase 3	59%	49%
Approval	83%	83%

- Probabilities of Success for Neurological indications<sup>1,2</sup>
- Cumulative risk refers to the probability of successfully completing all events in sequence
- 8.4% chance of achieving FDA Approval based on where the product stands today



## **Discount Rate**



The rNPV methodology allowed Destum Partners to best capture the risk implications of a preclinical program such as Linebacker

$$\mathcal{K}_e = \mathcal{K}_{rf} + \mathcal{S}(\mathcal{K}_m - \mathcal{K}_{rf})$$
12.5% = 2.1% + 1.19 (11% - 2.1%)

12.5%

- Discount rate was computed using the Capital Asset Pricing Model (CAPM) to capture company (β) and market (Km & Krf) risk
- The market premium is the expected return on an investment minus the risk free rate (Krf), which is based on the interest rate of a 10-year U.S. Treasury bill
- ullet Beta (eta) was determined through benchmarking comparable publically traded companies (right)

Comparable Company	Beta
1&1	0.66
Alkermes	1.65
Jazz	1.27
Average Beta	1.19

## **Valuation Outputs**



## **Asset Value**



### The value of Linebacker to treat Parkinson's disease is \$243M

## **U.S. Value**



\$121.6M

## **WW Value**



\$243.2M

**IRR** 

40%

- The value of Linebacker for the US is \$121.6M
- We extrapolated a global value of Linebacker for Parkinon's based on industry standards, as the US represents approximately 50% of the global pharma market, yielding a \$243.2M value
- The project generated a 40% IRR based on the US valuation

## Linebacker 1 – Huntington's Disease



## Huntington's Overview



Huntington's Disease (HD) is a rare, genetically inherited progressive neurodegenerative disease

- Huntington's disease (HD) is a fatal genetic disorder that causes the progressive breakdown of nerve cells in the brain
- It deteriorates a person's physical and mental abilities usually during their prime working years and has no cure
- CAG repeats in the Huntington's gene result in production of an abnormal protein that causes damages to neurons
- Symptoms usually appear between the ages of 30 to 50, and worsen over a 10 to 25-year period
- Ultimately, the weakened individual succumbs to pneumonia, heart failure or other complications

(1) Huntington's Disease Society of America. 33







Currently available therapeutic options for patients with HD are only able to provide symptomatic relief

- There are no disease modifying therapeutic options to stop or slow progression of HD
- Additionally, antipsychotic drugs, dopamine receptor blocking or depleting agents, neuroleptic drugs and antidepressants are used to help manage symptoms

Drug Name (Sponsor)	Target / MOA	Indication	Approval
Austedo (Teva) deutetrabenazine	Vesicular monoamine transporter 2 (VMAT2) inhibitor	Chorea associated with HD	2017
Xenazine (Lundbeck) Tetrabenazine	Vesicular monoamine transporter 2 (VMAT2) inhibitor	Chorea associated with HD	2008

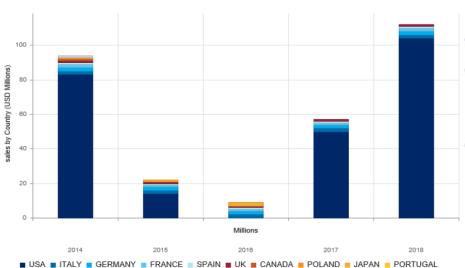


## Market Size



With minimal availability of drugs to treat patients, the current market size is dominated by Austedo, which generated \$412M in sales in 2019

International Product Name	Molecule	Corporation	2014	2015	2016	2017	2018	Change
Total			96	23	10	59	117	21
AUSTEDO	deutetrabenazine	TEVA	-	-	-	25	91	91
CLOMIPRAMINE MYLA	CLOMIPRAMINE	MYLAN	-	-	-	-	5	5
XENAZINE	TETRABENAZINE	LUNDBECK +10	82	3	3	4	5	-78
CLOMIPRAMINE TARP	CLOMIPRAMINE	TARO	-	-	-	-	3	3
NITOMAN	TETRABENAZINE	LUPIN +3	3	2	2	2	2	0
TETMODIS	TETRABENAZINE	ORPHA DEVEL +13	1	1	1	1	2	1
ANAFRANIL	CLOMIPRAMINE	NOVARTIS +23	-	-	-	-	1	1
CLOMIPRAMINE MALN	CLOMIPRAMINE	MALLINCKRODT	-	-	-	-	1	1
CLOMIPRAMINE SAWA	CLOMIPRAMINE	SAWAI	-	-	-	-	1	1
CLOMIPRAMINE NOVT	CLOMIPRAMINE	NOVARTIS	-	-	-	-	1	1
OTHERS			10	16	4	27	5	-5



■ BELGIUM ■ AUSTRIA ■ BRAZIL ■ GREECE ■ CZECH REPUBLIC ■ NETHERLANDS ■ SWITZERLAND

- In 2019 Austedo reported annual sales of \$ 412M<sup>2</sup>
- Austedo is the only approved (Albiet symptoms relief focused) patented drug, and represents majority of the market
  - The US represents the vast majority of the market and again driven almost exclusively by the sales of Austedo

■ IRELAND
■ SLOVAK REPUBLIC
■ MEXICO
■ OTHERS

<sup>(1)</sup> IQVIA ANALYTICS LINK



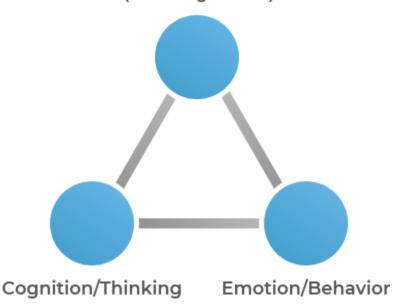




Available treatments address only symptom relief for patients, with a significant unmet need to slow the progression of disease

### HD symptoms fall into 3 main categories<sup>1</sup>

# Movement/Motor Symptoms (including chorea)



- Austedo specifically address the symptoms of chorea
- However, symptoms are categorized into movement/motor, cognition/thinking, and emotion/behavior
- This are no disease modifying agents that functions to slow the progression of the disease
- On average, after diagnosis, patients life expectancy is between 10-20 years<sup>2</sup>







### Linebacker will target all patients, resulting in a US target patient population of 41,000

- Approximately 41,000 patients in the US have been diagnosed with HD and 200,000 are at-risk of inheriting the disease<sup>1</sup>
- Prevalence of HD in Europe is approximately 120 cases per million people<sup>2</sup>
  - Currently, there are 322.5 million people in the EU5
  - EU5 prevalence of HD is approximately 38,700
- Patients with HD typically survive 15 20 years after symptoms develop
- US Target Patient Population: 41,000







Multiple disease modifying agents are in clinical development to either inhibit production of harmful proteins or deactivate the harmful proteins once made

Drug Name (Sponsor)	Indication	Phase (NCT Trial)	Patients	Trial Duration
IONIS-HTT <sub>Rx</sub> (Ionis / Roche)	HD	Phase 2 – Extension of Phase 1/2 NCT03342053	46	2 years
HTT Antisense	Early manifest HD	Phase 1/2 NCT02519036	46	2 years
Laquinimod (Teva) Aryl Hydrocarbon Receptor (AhR)	HD	Phase 2 NCT02215616	351	4 years
	Symptomatic treatment of HD	Phase 2 – Open label extension NCT01306929	235	10 years
Pridopidine (Teva) Sigma 1 Receptor (S1R)	HD	Phase 2 NCT02494778	248	2.5 years
	Symptomatic treatment of HD	Phase 2 NCT02006472	408	2.5 years
VX15/2503 (Vaccinex) SEMA4D mAb	Late Prodromal / Early manifest HD	Phase 2 NCT02481674	240	5 years
SRX246 (Azevan Pharmaceuticals) Vasopressin 1a (V1a) receptor	Irritability in HD	Phase 1/2 NCT02507284	108	2 years
WVE-120101 (Wave Life Sciences) mHTT mRNA	Early manifest HD	Phase 1/2 NCT03225833	48	2 years
WVE-120102 (Wave Life Sciences) mHTT mRNA	Early manifest HD	Phase 1/2 NCT03225846	48	2 years







There are no approved disease modifying drugs, however, there are a few in clinical development

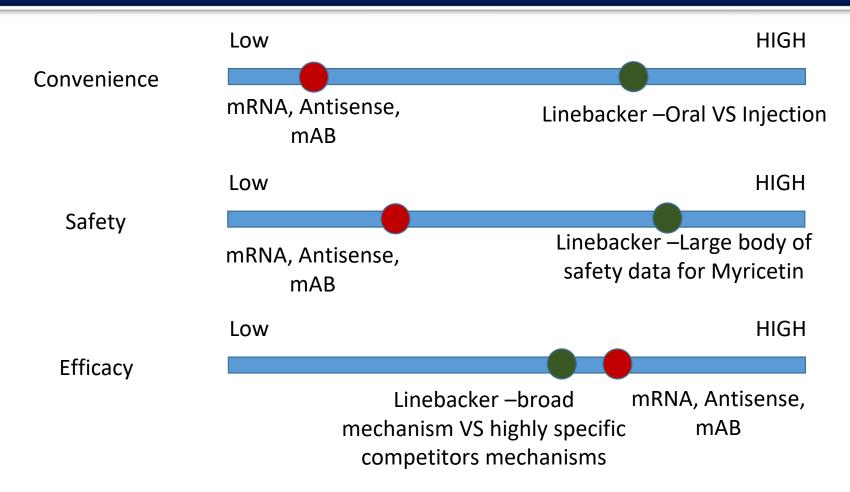
Category	Detail
Route of Administration	Orally bioavailable small molecule, with potential for once a day oral dosing
Mechanism of Action	Multimodal mechanism of action: anti-TNF $\!\alpha$ and activity against many associated CNS causes.
Indication	Huntington's Disease
Follow On Indications	Parkinson's Disease Stroke, Depression, Memory Deficits, and Cerebral Brain Injury
Safety	Strong safety profile supported by the extensive use of myricetin and Maximum Tolerated Dose study of LB-1
Efficacy	Slow or halt progression of disease in all Patients with a clinical diagnosis







Despite attractive pipeline drugs in development, Linebacker is still uniquely positioned to compete on improved convenience and safety, and with comparable efficacy









We anticipate drug approval in 2027, with a total spend of \$15M spread over a six (6) year period

Front	20	20	20	21	20	22	20	23	20	24	20	25	20	26	20	27
Event	H1	H2	Н1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2
Pre-Clin																
IND																
PI/II				\$5M¹												
PIII								10M²								
NDA																
Approval																

- For Huntington's clinical studies we have assumed \$100K per patient
- Sample sizes are: Phase I/II: 50 Patients, Phase III: 100
- Certain pre-clinical, regulatory and CMC costs were eliminated as they were absorbed with the Parkinson's valuation

<sup>(1)</sup> Wave Life Sciences sample size for Phase I/II

<sup>(2) &</sup>lt;a href="https://www.austedo.com/globalassets/austedo/prescribing-information.pdf">https://www.austedo.com/globalassets/austedo/prescribing-information.pdf</a>







#### Destum Partners utilized the following forecast assumptions for Linebacker:

	Destum Assumption	Rationale/Source
Forecast Period	2027 – 2036 (10 years)	Destum utilized a 10 year forecast to show revenue projections as the company will rely on IP that expires in H2 2036
Patient Population	41,000 Clinically Diagnosed Patients in 2020 (3% annual growth rate)	Source: hdsa.org
IP/Exclusivity	IP/exclusivity through 2036	issued patent #10,123,991, PTC filed for Rest of World (ROW)
Market Share	20% peak patient share, 3 years post launch (2029)	Destum assumes a 20% patient share due to the underlying focus on treating the disease, but with a number of potential competitors
Adherence	65%	Industry standard for CNS
Annual WAC price	\$21,350 (growing at 3% inflation)	Adopt Parkinson's price. Austedo Price: \$26K Annual WAC Price. Source: Redbook
Gross to Net Calculation	70% of Sales	Industry standard







#### Destum Partners utilized the following forecast assumptions for Linebacker:

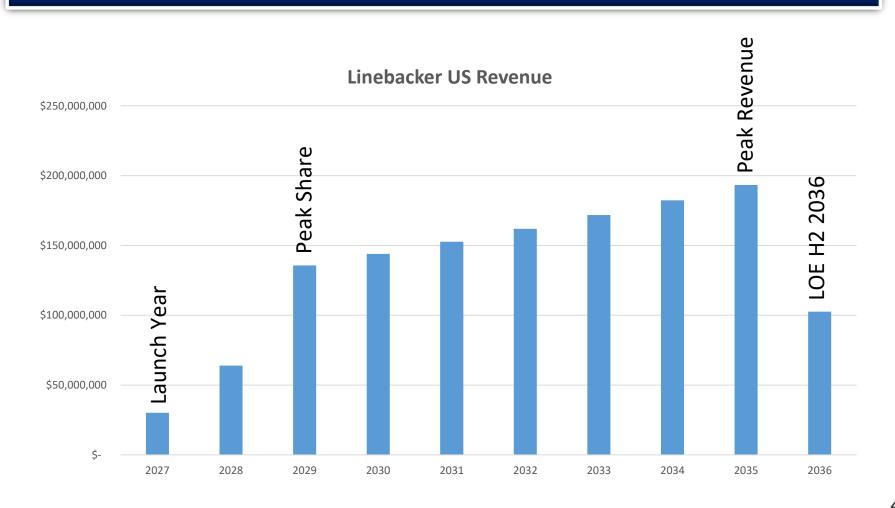
	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
HD Patients	50,425	51,938	53,496	55,101	56,754	58,456	60,210	62,016	63,877	65,793
Linebacker Patient Share	5%	10%	20%	20%	20%	20%	20%	20%	20%	20%
Adherence Rate	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%
Linebacker Treated Patients	1,639	3,376	6,954	7,163	7,378	7,599	7,827	8,062	8,304	4,277
Annual WAC per Patient (3% inflation)	\$ 26,258	\$ 27,046	\$27,857	\$ 28,693	\$ 29,553	\$ 30,440	\$ 31,353	\$ 32,294	\$ 33,263	\$ 34,260
Linebacker U.S. Gross Revenue	\$ 43M	\$ 91,3M	\$ 194M	\$ 205,5M	\$ 218M	\$ 231,3M	\$ 245,4M	\$ 260,4M	\$ 276,2M	\$ 146,5M
Linebacker U.S. Net Revenue (70%)	\$ 30,1M	\$ 63,9	\$ 135,6M	\$ 143,9M	\$ 152,6M	\$ 161,9M	\$ 171,8M	\$ 182,3M	\$ 193,3M	\$ 102,6M







#### Destum Partners peak patient share in 2039 with US revenue of \$ 135M





## **Probabilities of Success**



#### 8.4% probability of approval based on the current stage of development

Event	Single Event Likelihood of Success	Cumulative Likelihood of Success*
Pre-Clinical	95%	8.4%
Phase 1/2	18%	8.8%
Phase 3	59%	49%
Approval	83%	83%

- Probabilities of Success for Neurological indications<sup>1,2</sup>
- Cumulative risk refers to the probability of successfully completing all events in sequence
- 8.4% chance of achieving FDA Approval based on where the product stands today

<sup>1.</sup> Nat Biotech. 2014; 32(1): 40-51

<sup>2.</sup> Clinical Development Success Rates 2006 – 2015. BIO Industry Analysis



### **Discount Rate**



The rNPV methodology allowed Destum Partners to best capture the risk implications of a preclinical program such as Linebacker

$$\mathcal{K}_e = \mathcal{K}_{rf} + \mathcal{S}(\mathcal{K}_m - \mathcal{K}_{rf})$$
12.5% = 2.1% + 1.19 (11% - 2.1%)

12.5%

- Discount rate was computed using the Capital Asset Pricing Model (CAPM) to capture company (β) and market (Km & Krf) risk
- The market premium is the expected return on an investment minus the risk free rate (Krf), which is based on the interest rate of a 10-year U.S. Treasury bill
- ullet Beta (eta) was determined through benchmarking comparable publically traded companies (right)

Comparable Company	Beta
1&1	0.66
Alkermes	1.65
Jazz	1.27
Average Beta	1.19

## **Valuation Outputs**



### **Asset Value**



#### The value of Linebacker to treat Huntington's disease is \$ 18.8M

### **U.S. Value**



\$9.4M

## **WW Value**



\$18.8M

**IRR** 

29%

- The value of Linebacker for the US is \$9.4M
- We extrapolated a global value of Linebacker for Huntington's based on industry standards, as the US represents approximately 50% of the global pharma market, yielding a \$ 18.8M value
- The project generated a 29% IRR based on the US valuation

# Linebacker 2 - RSV



### **RSV Overview**



Respiratory syncytial virus (RSV) is a common respiratory virus that can result in serious infection for infants and older adults

- RSV infections spread through respiratory secretions and peak during winter months, usually coinciding with influenza
- An estimated 18 million people are infected with RSV annually in the 7MM¹, including:
  - Pediatric most frequent cause of hospitalization of infants worldwide
    - Over 9 million children under the age of 4 infected annually in the 7MM<sup>1</sup>
    - 2/3 of infants are infected in their first year<sup>2</sup>
    - Results in ~132,000-172,000 hospitalizations and 2.1 million outpatient visits annually among children <5 years old in the US<sup>2</sup>
    - $\circ$  ~300,0000 children hospitalized per year in 7MM (~128,000-168,000 hospitalizations occur in EU5)<sup>3</sup>

#### Adult

- ~5.5 million elderly & 3 million adults with underlying disease infected annually in the 7MM¹
- ~177,000 hospitalizations and 14,000 deaths annually in the US
- ~630,000 adults hospitalized per year in 7MM
- About 928,000 individuals become hospitalized due to their RSV infections annually in the 7MM<sup>1</sup>

arget Patient

Linebacker

Population

<sup>(1)</sup> Aviragen Therapuetics

J&J Pharmaceutical Business Review Day: Infectious Disease. May 17, 2017

<sup>(3)</sup> Ablynx ALX-0171 Presentation. Respiratory Drug Delivery Europe 2015. May 6, 2015



# **Approvals**



#### There are no widely accepted drugs available to treat RSV infections

Drug Name (Sponsor)	Target / MOA	Indication	Approval
Synagis (AstraZeneca) Palivizumab	F protein	<ul> <li>Prevention of serious lower respiratory tract disease caused by RSV in pediatric patients:</li> <li>With a history of premature birth who are ≤6m at the beginning of RSV season</li> <li>With bronchopulmonary dysplasia (BPD) requiring treatment within last 6 m and who are ≤24m at the beginning of RSV season</li> <li>With hemodynamically significant congenital heart disease (CHD) and who are ≤24m at the beginning of RSV season</li> </ul>	1998
Aerosolized Ribavirin	Synthetic guanosine nucleoside	Treatment of hospitalized infants and young children with severe lower respiratory tract infections caused by RSV	1985

- Subsequent meta-analysis of ribavirin after approval concluded that treatment with aerosolized ribavirin failed to demonstrate clinically meaningful benefits<sup>1</sup>
- Perceptions of limited clinical benefits and concerns for mutagenicity, carcinogenicity and teratogenicity has resulted in the infrequent use of ribavirin for treatment of RSV-associated illness<sup>1</sup>







Drug Name (Sponsor)	Indication	Phase (NCT Trial)	Patients	Trial Duration
AVOE 20 (Ark Biossioness)	Hospitalized Infants with RSV infections	Phase 2 NCT02654171	78	1.5 years
AK0529 (Ark Biosciences)	Healthy adults	Phase 1 NCT02297594	74	1 year
ALX-0171 (Ablynx) F-protein	Infants and Young Children Hospitalized for RSV infection	Phase 2 NCT02979431	180	1.5 years
BTA-585 (Aviragen Therapeutics) F-protein	Virus Challenge Model	Phase 2 NCT02718937	60	0.5 years
JNJ-53718678 (Janssen) Fusion	Non-Hospitalized Adults with RSV infections	Phase 2 NCT03379675	75	1.5 years
Lumicitabine (Janssen) nucleoside analog	Adult Subjects Hospitalized with RSV infections	Phase 2 NCT02935673	126	2.5 years
Presatovir (Gilead) fusion F protein	Hospitalized Adults with RSV infections	Phase 2b NCT02135614	190	3 years
RSV-MVA-BN (Bavarian Nordic) Vaccine	Vaccine Phase II Trial in ≥ 55 Year Old Adults	Phase 2 NCT02873286	400	2 years
RV521 (ReViral) Fusion	Virus Challenge Model	Phase 2 NCT03258502	66	0.5 years
PC786 (Pulmocide) L protein polymerase	Healthy Adult Subjects in a Virus Challenge Model	Phase 1/2 NCT03382431	56	0.5 years
EDP-938 (Enanta Pharmaceuticals) N-protein	Healthy Subjects	Phase 1 NCT03384823	82	0.5 years
VXA-RSV-f (Vaxart/Aviragen) Oral vaccine	Healthy Subjects	Phase 1 NCT02830932	66	1.5 years







#### Programs in Phase 3 development for first-line treatment of RSV

Product	Presatovir (GS-5806) (Gilead)	Lumicitabine (JNJ-1575) (Janssen)
MoA	RSV fusion inhibitor	Nucleoside analog
Phase 2 Trial	190-patient randomized, double blind study of Presatovir in hospitalized adults with respiratory syncytial virus (RSV) infection	126-patient randomized, double blind study of Lumicitabine regimens in adult participants hospitalized with respiratory syncytial virus
Formulation	200mg Presatovir (4 x 50mg tablets)  • Administered orally in a single dose	750-1000mg Lumicitabine tablet once – followed by 250-500mg Lumicitabine for nine days  • Administered orally, twice daily
Endpoints	<ul> <li>Primary Endpoint: Time-weighted average change in respiratory syncytial viral load</li> <li>Secondary Endpoint: Time-weighted average change in the FLU-PRO score</li> </ul>	<ul> <li>Primary Endpoint: Maximum Observed Plasma Concentration (Cmax) of Lumicitabine</li> <li>Secondary Endpoint: Length of hospital stay from study treatment initiation to discharge</li> </ul>
Signals of Efficacy	Phase 2a trial in RSV:  • GS-5806 has been shown to reduce viral load and disease severity in adults experimentally infected with RSV (treatment resulted in a 99.9 percent reduction in the viral load)	Non-clinical data on Lumicitabine:  • The nucleoside triphosphate analogue inhibits RSV replication by means of chain termination.







Based on the target profile below for Linebacker 2, Destum assumes a conservative forecast with peak market uptake of 10% in combination with supportive care

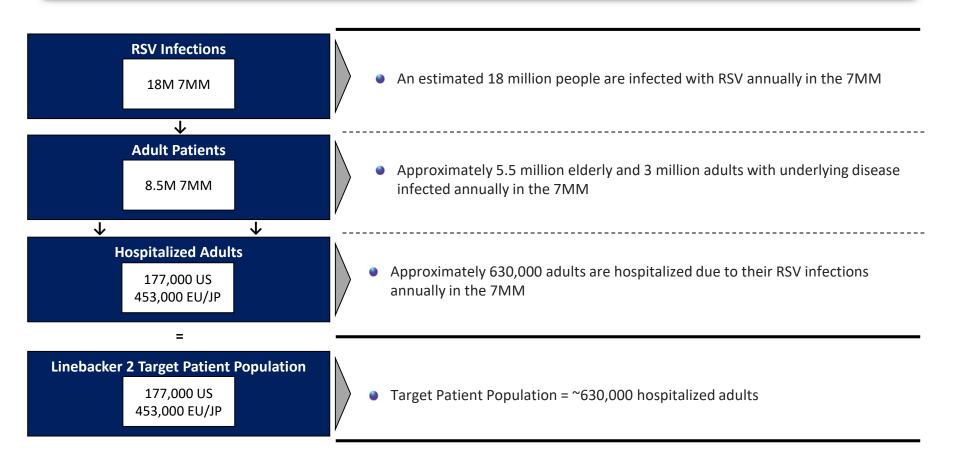
Product	Linebacker 1
МоА	Demonstrated antiviral activity in vitro
Formulation	Oral formulation
Competitors - Assumption	Assumes one late stage program as a competitor:  • Few drugs in late-stage development for first-line RSV treatment, but some orally available agents being developed by reputable companies
Positioning	Linebacker 2 will be used to treat hospitalized adults due to respiratory syncytial virus (RSV) associated disease
Efficacy Requirements	<ul> <li>Efficacy endpoints have not been definitively established for treatment of RSV         <ul> <li>Global BioLife should work closely with the FDA to identify reliable and robust endpoints</li> <li>Primary Endpoint: Improvement in clinical signs and symptoms of RSV disease</li> <li>Secondary Endpoint: Virologic assessments, prevention of disease progression, duration of hospitalization, duration of persistent symptoms, need for ventilation, etc</li> </ul> </li> </ul>





# **Target Patient Population**

Linebacker 2 will be positioned as a treatment for respiratory syncytial virus (RSV) associated disease in hospitalized adults



<sup>(1)</sup> Aviragen Therapuetics

<sup>2)</sup> J&J Pharmaceutical Business Review Day: Infectious Disease. May 17, 2017

Ablynx ALX-0171 Presentation. Respiratory Drug Delivery Europe 2015. May 6, 2015



# Clinical Development Pathway



Based on the below clinical and regulatory plan, Destum estimates Linebacker launch in H1 2029; Total clinical, regulatory, manufacturing, and post-launch costs estimate: ~\$54M



<sup>\*</sup>Assumes a price per patient of \$50k

- Preclinical Costs (US & EU5) \$1,300,000
- IND Cost (US) \$100,000
- CTA Cost (EU5) \$60,000

- P2 Meeting Cost (US & EU5) \$500,000
- NDA Cost (US) \$1,000,000
- EMA Cost (EU5) \$500,000



### **Probabilities of Success**



#### 14% probability of approval based on the current stage of development

Event	Single Event Likelihood of Success	Cumulative Likelihood of Success*
Phase 1	66%	14%
Phase 2	37%	21%
Phase 3	64%	58%
Approval	90%	90%

- Probabilities of Success for Infectious Disease & Respiratory indications<sup>1,2</sup>
- Cumulative risk refers to the probability of successfully completing all events in sequence
- 14% chance of achieving FDA Approval based on where the product stands today



## Revenue Forecast



	Detailed	I revenue forecast for R	SV
--	----------	--------------------------	----

US	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Annual Incidence (101%)	197,473	199,448	201,443	203,457	205,492	207,546	209,622	211,718	213,835	215,974	218,133
Market Share	2%	4%	7%	9%	10%	10%	10%	10%	10%	10%	10%
Taking Linebacker	3,949	7,978	14,101	17,294	20,549	20,755	20,962	21,172	21,384	21,597	21,813
Drug Price (3% inflation)	\$13,842	\$14,258	\$14,685	\$15,126	\$15,580	\$16,047	\$16,528	\$17,024	\$17,535	\$18,061	\$18,603
Gross Revenue	\$54,669,845	\$113,746,080	\$207,077,583	\$261,584,840	\$320,149,069	\$333,051,077	\$346,473,035	\$360,435,899	\$374,961,465	\$390,072,412	\$405,792,331
Net Revenue (80% Gross-Net)	\$43,735,876	\$90,996,864	\$165,662,066	\$209,267,872	\$256,119,255	\$266,440,861	\$277,178,428	\$288,348,719	\$299,969,172	\$312,057,930	\$324,633,864
EU5	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Annual Incidence (101%)	505,398	510,452	515,556	520,712	525,919	531,178	536,490	541,855	547,273	552,746	558,274
Market Share	2%	4%	7%	9%	10%	10%	10%	10%	10%	10%	10%
Taking Linebacker	10,108	20,418	36,089	44,261	52,592	53,118	53,649	54,185	54,727	55,275	55,827
Drug Price (3% inflation)	\$8,305	\$8,555	\$8,811	\$9,076	\$9,348	\$9,628	\$9,917	\$10,215	\$10,521	\$10,837	\$11,162
Gross Revenue	\$83,950,644	\$174,667,710	\$317,986,932	\$401,687,907	\$491,618,740	\$511,430,976	\$532,041,644	\$553,482,922	\$575,788,284	\$598,992,552	\$623,131,952
Net Revenue (80% Gross-Net)	\$67,160,515	\$139,734,168	\$254,389,546	\$321,350,325	\$393,294,992	\$409,144,780	\$425,633,315	\$442,786,338	\$460,630,627	\$479,194,041	\$498,505,561

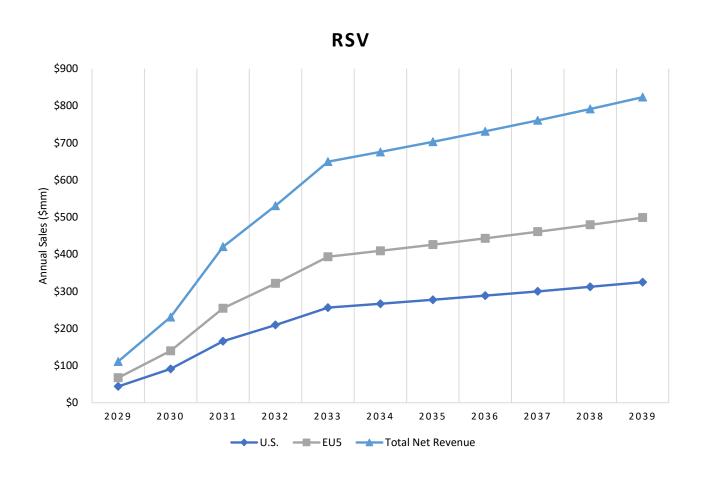
Total Net Revenue \$110,896,391 \$230,731,032 \$420,051,612 \$530,618,197 \$649,414,248 \$675,585,642 \$702,811,743 \$731,135,057 \$760,599,799 \$791,251,971 \$823,139,426







#### Projected net revenue of \$823 million in RSV by 2039 in U.S. & EU5





### **Discount Rate**



The rNPV methodology allowed Destum Partners to best capture the risk implications of a preclinical program such as Linebacker

$$\mathcal{K}_e = \mathcal{K}_{rf} + \mathcal{S}(\mathcal{K}_m - \mathcal{K}_{rf})$$
12.5% = 2.1% + 1.19 (11% - 2.1%)

12.5%

- Discount rate was computed using the Capital Asset Pricing Model (CAPM) to capture company (β) and market (Km & Krf) risk
- The market premium is the expected return on an investment minus the risk free rate (Krf), which is based on the interest rate of a 10-year U.S. Treasury bill
- ullet Beta (eta) was determined through benchmarking comparable publically traded companies (right)

Comparable Company	Beta	
1&1	0.66	
Alkermes	1.65	
Jazz	1.27	
Average Beta	1.19	

## **Valuation Outputs**



### **Asset Value**



The worldwide value of Linebacker-2 to treat RSV is \$83.5 million

## **US Value EU5 Value**





\$24.8M

\$42M

# **WW Value**



\$83.5M

**IRR** 

26%

- The value of Linebacker for the U.S. is \$26.8M
- We assumed sales would be primarily concentrated in the U.S. and Europe and thus believe those markets to represent the vast majority of worldwide value
- Rest of World is expected to contribute 20% of value
- The project generated a 26% IRR based on the U.S. and EU5 valuation

# Linebacker-2 - COVID-19







After identifying select companies with leading COVID-19 programs, Destum chose to initially evaluate only those that were public with a market capitalization of under \$50 billion (bolded)

Company	Drug Modality	Phase of Development	Treatment Name	Market Cap (3/26)
Bellerophon	Drug Delivery System	Phase 2	INOpulse(R)	\$82,400,000
Biogen	Treatment	Preclinical	TBD	\$53,100,000,000
BioNTech	Vaccine	Preclinical	BNT162	\$15,100,000,000
CureVac	RNA-based vaccine	Preclinical	TBD	Private
Gilead	Treatment	Phase 3	remdesivir	\$94,200,000,000
GlaxoSmithKline	Pandemic adjuvant platform for vaccines	Discovery Platform	AS03 Adjuvant System	\$91,800,000,000
Heat Biologics	Vaccine	Preclinical	TBD	\$35,500,000
Inovio Pharmaceuticals	DNA-based vaccine	Preclinical	INO-4800	\$974,000,000
Johnson & Johnson	Vaccine	Multiple Candidates	TBD	\$360,000,000,000
Moderna	RNA-based vaccine	Phase 1	mRNA-1273	\$10,400,000,000
NanoViricides	Treatment	Preclinical	TBD	\$35,600,000
Novavax	Vaccine	Preclinical	TBD	\$606,000,000
Pfizer	Vaccine	Preclinical	BNT162	\$174,800,000,000
Regeneron	Treatment	Preclinical	TBD	\$54,100,000,000
Vaxart	Vaccine	Preclinical	TBD	\$86,900,000
Vir Biotechnology	Treatment	Preclinical	TBD	\$5,500,000,000

# **Company Overviews**



# Bellerophon



Name - Bellerophon Therapeutics, Inc.

Ticker - BLPH



**Core Business Operations –** Bellerophon Therapeutics is a clinical-stage biotherapeutics company focused on developing innovative therapies in the treatment of cardiopulmonary diseases. The company's mission is to develop well-studied molecules deployed through innovative delivery systems to treat diseases with significant unmet clinical need.

Announcement Date – March 20th, 2020

**Announcement Summary –** Using a regulatory pathway that allows patients with life-threatening conditions to use unapproved therapies, the FDA has granted "emergency expanded access" to Bellerophon Therapeutics' inhaled nitric oxide delivery system for treating the novel coronavirus.

Source: Fierce Biotech



# Bellerophon



Market Value Impact from Day Prior to Announcement (3/19) to 5-day VWAP

- Share price increase of \$12.63
- Share price percentage increase of 327%
- Market capitalization increase of \$57,830,054





### BioNTech



Name - BioNTech SE

Ticker - BNTX



**Core Business Operations –** Biopharmaceutical New Technologies (BioNTech) is a next generation immunotherapy company pioneering novel therapies for cancer and other serious diseases. The company exploits a wide array of computational discovery and therapeutic drug platforms for the rapid development of novel biopharmaceuticals.

Announcement Date – March 17th, 2020

**Announcement Summary –** Pharma giant Pfizer announced that it's working on a potential COVID-19 vaccine with BioNTech, a German company working on new kinds of immunotherapy treatments. The joint effort, confirmed via a signed letter of intent, will see both partners work together on a messenger RNA-based vaccine that will seek to prevent people from contracting the new coronavirus.

Source: Company Press Release



### **BioNTech**



Market Value Impact from Day Prior to Announcement (3/16) to 5-day VWAP

- Share price increase of \$28.43
- Share price percentage increase of 71%
- Market capitalization increase of \$6,448,095,919





# **Heat Biologics**



Name - Heat Biologics Inc.

Ticker - HTBX



**Core Business Operations –** Heat Biologics is a biopharmaceutical company headquartered in Morrisville, NC specializing in the development of therapeutic vaccines. The company has a proprietary gp96 platform to activate immune responses against pathogenic or cancer antigens.

Announcement Date – March 2<sup>nd,</sup> 2020

**Announcement Summary – T**he Company has formally launched a program within its wholly-owned subsidiary, Zolovax, Inc., to develop a vaccine using its immune activating gp96 vaccine platform for treating or preventing infection from the SARS-CoV-2 coronavirus that causes COVID-19. The Company also announced that it has filed a provisional patent for use of its technology platform for treating or preventing infection with the SARS-CoV-2 virus that causes coronavirus disease 2019 (COVID-19).

Source: Company Press Release



# **Heat Biologics**



Market Value Impact from Day Prior to Announcement (3/19) to 5-day VWAP

- Share price increase of \$0.50
- Share price percentage increase of 152%
- Market capitalization increase of \$30,720,674





# Inovio Pharmaceuticals



Name - Inovio Pharmaceuticals, Inc.

Ticker - INO



**Core Business Operations –** Inovio, a pre revenue vaccine company, is advancing novel immunotherapy technologies to reshape the future of treating and preventing infectious diseases and cancer.

Announcement Date - March 3rd, 2020

**Announcement Summary –** Inovio announced an accelerated timeline for developing its DNA vaccine INO-4800 to address COVID-19. The company immediately began preclinical testing and small-scale manufacture and have already shared robust preclinical data with their public and private partners. They plan to begin human clinical trials in the U.S. in April and soon thereafter in China and South Korea.



### **Inovio Pharmaceuticals**



#### Market Value Impact from Day Prior to Announcement (3/2) to 5-day VWAP

- Share price increase of \$5.41
- Share price percentage increase of 123%
- Market capitalization increase of \$788,185,696





### Moderna



Name - Moderna, Inc.

Ticker - MRNA



messenger therapeutics

**Core Business Operations –** Moderna, Inc. is a biotechnology company focused on drug discovery and drug development based on messenger RNA. The company creates synthetic mRNA that can be injected into patients to help them create their own therapies.

**Announcement Date –** February 25<sup>th</sup>, 2020 (after trading hours on the 24<sup>th</sup>)

**Announcement Summary –** Moderna announced that it has released the first batch of mRNA-1273, the Company's vaccine against the novel coronavirus, for human use. Vials of mRNA-1273 have been shipped to the National Institute of Allergy and Infectious Diseases (NIAID), a part of the National Institutes of Health (NIH) to be used in the planned Phase 1 study in the U.S.



## Moderna



#### Market Value Impact from Day Prior to Announcement (2/24) to 5-day VWAP

- Share price increase of \$8.35
- Share price percentage increase of 45%
- Market capitalization increase of \$2,746,491,066





# **NanoViricides**



Name - NanoViricides, Inc.

Ticker - NNVC



**Core Business Operations –** NanoViricides is a global leader in the development of nanomedicine drugs against viruses. The company's unique nanoviricide® platform technology defines a novel mechanism enabling first-in class drugs against viruses.

Announcement Date – January 30<sup>th</sup>, 2020

**Announcement Summary –** Nanoviricides is confirming public disclosures in articles by various industry journals and other articles, that it is working on developing a treatment for the novel coronavirus 2019-nCoV, or the Wuhan coronavirus. The company will need support from governmental and international agencies such as the US CDC, WHO, and Chinese CDC to successfully develop these treatments, however, at this time, the Company does not have a collaboration with any of these agencies.

Source: Barron's



### **NanoViricides**



#### Market Value Impact from Day Prior to Announcement (1/29) to 5-day VWAP

- Share price increase of \$3.98
- Share price percentage increase of 42%
- Market capitalization increase of \$29,519,095





### Novavax



Name - Novavax, Inc.

Ticker - NVAX



**Core Business Operations –** Novavax is a clinical-stage biotechnology company committed to delivering novel products to prevent a broad range of infectious diseases, using innovative proprietary recombinant nanoparticle vaccine technology

Announcement Date - February 26th, 2020

**Announcement Summary –** Novavax announced progress in its efforts to develop a novel vaccine to protect against coronavirus disease COVID-19. Novavax has produced and is currently assessing multiple nanoparticle vaccine candidates in animal models prior to identifying an optimal candidate for human testing, which is expected to begin by the end of spring 2020.



### Novavax



### Market Value Impact from Day Prior to Announcement (2/25) to 5-day VWAP

- Share price increase of \$4.47
- Share price percentage increase of 56%
- Market capitalization increase of \$230,452,306





### Vaxart



Name - Vaxart, Inc.

Ticker - VXRT



**Core Business Operations –** Vaxart is focused on the discovery, development, and commercialization of oral recombinant vaccines administered using temperature-stable tablets that can be stored and shipped without refrigeration, eliminating the need for needle injection.

Announcement Date - March 18th, 2020

Announcement Summary – Vaxart announced that it has entered into an agreement with Emergent BioSolutions Inc., whereby Emergent will deploy its molecule-to-market contract development and manufacturing (CDMO) services to help develop and manufacture Vaxart's experimental oral vaccine candidate for coronavirus disease (COVID-19). Vaxart's oral recombinant vaccine candidate is based on its proprietary VAAST™ platform.

Source: BioSpace



### Vaxart



### Market Value Impact from Day Prior to Announcement (3/17) to 5-day VWAP

- Share price increase of \$0.19
- Share price percentage increase of 10%
- Market capitalization increase of \$9,757,049





# Vir Biotechnologies



Name - Vir Biotechnologies, Inc.

Ticker - VIR



**Core Business Operations –** Vir Biotechnologies is a clinical-stage immunology company focused on combining immunologic insights with cutting-edge technologies to treat and prevent serious infectious diseases.

**Announcement Date –** February 25<sup>th</sup>, 2020

**Announcement Summary –** Vir Biotechnology and WuXi Biologics announced a development and manufacturing collaboration to advance and produce human monoclonal antibodies for the potential treatment of COVID-19 (Coronavirus Disease 2019). Under the terms of the agreement, the companies will work together on the clinical development, manufacturing, and commercialization of Vir's proprietary antibodies.

Source: Barron's







Market Value Impact from Day Prior to Announcement (2/24) to 5-day VWAP

- Share price increase of \$28.77
- Share price percentage increase of 152%
- Market capitalization increase of \$3,155,320,483



### **Valuation Outputs**



# Results Summary



Overall, larger companies tended to experience a more significant stock appreciation from pursuing a COVID-19 therapeutic when compared to smaller, less capable companies

Company	Drug Modality	Stage of Development	Percent Change in Share Price	Market Cap as of 3/26	Market Cap Change Due to Announcement	Market Cap Attributed to COVID-9 Program
BioNTech	Vaccine	Preclinical	71%	\$15,100,000,000	\$6,448,095,919	43%
Moderna	RNA-based vaccine	Phase 1	45%	\$10,400,000,000	\$2,746,491,066	26%
Vir Biotechnology	Treatment	Preclinical	152%	\$5,500,000,000	\$3,155,320,483	57%
Inovio Pharmaceuticals	DNA-based vaccine	Preclinical	123%	\$974,000,000	\$788,185,696	81%
Novavax	Vaccine	Preclinical	56%	\$606,000,000	\$230,452,306	38%
Vaxart	Vaccine	Preclinical	10%	\$86,900,000	\$9,757,049	11%
Bellerophon	Drug Delivery System	Phase 2	372%	\$82,400,000	\$57,830,054	70%
NanoViricides	Treatment	Preclinical	42%	\$35,600,000	\$29,519,095	83%
Heat Biologics	Vaccine	Preclinical	152%	\$35,500,000	\$30,720,674	87%
Averages			114%	\$3,646,711,111	\$1,499,596,927	55%

Source: Yahoo Finance

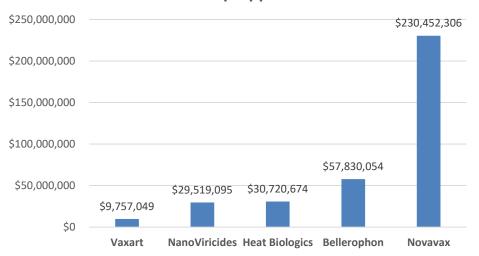






Destum focused on a select group of companies with similar capital restraints, development and commercial capabilities, and industry backing

#### **Market Cap Appreciation**



- Based on the criteria outlined below, the five companies that are most comparable to DSS experienced an average increase in market capitalization of \$72 million, which Destum considers to be the most accurate and supportable representation of valuation
- Capital Restraints: No large cash reserves or ability to service significant amounts of debt
- Development & Commercial Capabilities: Limited or out-sourced development capabilities with no commercial infrastructure currently in place
- Industry Backing: No publicized industry partnerships or collaborations, and minimal funding commitment from relevant government agencies at time of announcement



### **COVID-19 Treatment Value**



Based on the market appreciation experienced by comparable companies, Destum believes the value of developing a treatment for COVID-19 to be approximately ~\$72 million

- In the absence of reliable and reasonably accurate patient and drug pricing information, Destum chose to value pursuing development of a COVID-19 treatment through identifying the value public investors attributed to it in the form of market capitalization appreciation despite recent market volatility
- In order to further refine the valuation, additional considerations were made to those companies included in the calculation such as market cap, established industry presence and public partnerships or collaborations
- The average market cap increase for these select companies based on a 5-day post-announcement volume weighted average price increase was approximately \$72 million which Destum believes to be the most supportable valuation of DSS committing to developing a COVID-19 treatment
- As the landscape for treatment constantly changes, various factors could have significant implications on this value, including, among others, additional treatments gaining approval or a rapid decline in incidence

Value of Linebacker for COVID-19



\$72 million

# Equivir







#### **PROJECT OBJECTIVES & SCOPE**

- Conduct a global valuation exercise for Equivir as a therapeutic intervention for the treatment of COVID-19, as well as, an antiviral treatment for Influenza A & B in uncomplicated and high-risk adults
- Territories: Global
- Indication(s): COVID-19 & Influenza A/B
- Output(s):
  - Value attributed to developing and commercializing a vaccine or treatment for COVID-19
  - rNPV for an orally available influenza antiviral for uncomplicated and high-risk adults

#### **PROJECT METHODOLOGY & RATIONALE (COVID-19)**

- Due to the scarcity of reliable information typically used in intrinsic valuations (DCF) and the constantly
  evolving understanding of the disease, Destum has chosen to rely on publicly traded comparables in order to
  most accurately identify the value associated with developing a treatment for COVID-19
- To do this, Destum compared the market capitalization of companies prior to announcing a COVID-19
  initiative to their market cap afterwards, isolating the value investors attribute to a potential treatment
- To account for large swings in the stock price in the days following an announcement, a 5-day volume weighted average price (VWAP) was leveraged in an effort to capture the true value change, absent of any emotional or speculative trading that may unrealistically influence results

# **Equivir - COVID-19**







After identifying select companies with leading COVID-19 programs, Destum chose to initially evaluate only those that were public with a market capitalization of under \$50 billion (bolded)

Company	Drug Modality	Phase of Development	Treatment Name	Market Cap (3/26)
Bellerophon	Drug Delivery System	Phase 2	INOpulse(R)	\$82,400,000
Biogen	Treatment	Preclinical	TBD	\$53,100,000,000
BioNTech	Vaccine	Preclinical	BNT162	\$15,100,000,000
CureVac	RNA-based vaccine	Preclinical	TBD	Private
Gilead	Treatment	Phase 3	remdesivir	\$94,200,000,000
GlaxoSmithKline	Pandemic adjuvant platform for vaccines	Discovery Platform	AS03 Adjuvant System	\$91,800,000,000
Heat Biologics	Vaccine	Preclinical	TBD	\$35,500,000
Inovio Pharmaceuticals	DNA-based vaccine	Preclinical	INO-4800	\$974,000,000
Johnson & Johnson	Vaccine	Multiple Candidates	TBD	\$360,000,000,000
Moderna	RNA-based vaccine	Phase 1	mRNA-1273	\$10,400,000,000
NanoViricides	Treatment	Preclinical	TBD	\$35,600,000
Novavax	Vaccine	Preclinical	TBD	\$606,000,000
Pfizer	Vaccine	Preclinical	BNT162	\$174,800,000,000
Regeneron	Treatment	Preclinical	TBD	\$54,100,000,000
Vaxart	Vaccine	Preclinical	TBD	\$86,900,000
Vir Biotechnology	Treatment	Preclinical	TBD	\$5,500,000,000

## **Company Overviews**



# Bellerophon



Name - Bellerophon Therapeutics, Inc.

Ticker - BLPH



**Core Business Operations –** Bellerophon Therapeutics is a clinical-stage biotherapeutics company focused on developing innovative therapies in the treatment of cardiopulmonary diseases. The company's mission is to develop well-studied molecules deployed through innovative delivery systems to treat diseases with significant unmet clinical need.

Announcement Date – March 20th, 2020

**Announcement Summary –** Using a regulatory pathway that allows patients with life-threatening conditions to use unapproved therapies, the FDA has granted "emergency expanded access" to Bellerophon Therapeutics' inhaled nitric oxide delivery system for treating the novel coronavirus.



# Bellerophon



Market Value Impact from Day Prior to Announcement (3/19) to 5-day VWAP

- Share price increase of \$12.63
- Share price percentage increase of 327%
- Market capitalization increase of \$57,830,054





### BioNTech



Name - BioNTech SE

Ticker - BNTX



**Core Business Operations –** Biopharmaceutical New Technologies (BioNTech) is a next generation immunotherapy company pioneering novel therapies for cancer and other serious diseases. The company exploits a wide array of computational discovery and therapeutic drug platforms for the rapid development of novel biopharmaceuticals.

Announcement Date – March 17th, 2020

**Announcement Summary –** Pharma giant Pfizer announced that it's working on a potential COVID-19 vaccine with BioNTech, a German company working on new kinds of immunotherapy treatments. The joint effort, confirmed via a signed letter of intent, will see both partners work together on a messenger RNA-based vaccine that will seek to prevent people from contracting the new coronavirus.

Source: Company Press Release



### **BioNTech**



Market Value Impact from Day Prior to Announcement (3/16) to 5-day VWAP

- Share price increase of \$28.43
- Share price percentage increase of 71%
- Market capitalization increase of \$6,448,095,919





# **Heat Biologics**



Name - Heat Biologics Inc.

Ticker - HTBX



**Core Business Operations –** Heat Biologics is a biopharmaceutical company headquartered in Morrisville, NC specializing in the development of therapeutic vaccines. The company has a proprietary gp96 platform to activate immune responses against pathogenic or cancer antigens.

Announcement Date – March 2<sup>nd,</sup> 2020

**Announcement Summary – T**he Company has formally launched a program within its wholly-owned subsidiary, Zolovax, Inc., to develop a vaccine using its immune activating gp96 vaccine platform for treating or preventing infection from the SARS-CoV-2 coronavirus that causes COVID-19. The Company also announced that it has filed a provisional patent for use of its technology platform for treating or preventing infection with the SARS-CoV-2 virus that causes coronavirus disease 2019 (COVID-19).

Source: Company Press Release



# **Heat Biologics**



### Market Value Impact from Day Prior to Announcement (3/19) to 5-day VWAP

- Share price increase of \$0.50
- Share price percentage increase of 152%
- Market capitalization increase of \$30,720,674





## Inovio Pharmaceuticals



Name - Inovio Pharmaceuticals, Inc.

Ticker - INO



**Core Business Operations –** Inovio, a pre revenue vaccine company, is advancing novel immunotherapy technologies to reshape the future of treating and preventing infectious diseases and cancer.

Announcement Date - March 3rd, 2020

**Announcement Summary** – Inovio announced an accelerated timeline for developing its DNA vaccine INO-4800 to address COVID-19. The company immediately began preclinical testing and small-scale manufacture and have already shared robust preclinical data with their public and private partners. They plan to begin human clinical trials in the U.S. in April and soon thereafter in China and South Korea.



### Inovio Pharmaceuticals



### Market Value Impact from Day Prior to Announcement (3/2) to 5-day VWAP

- Share price increase of \$5.41
- Share price percentage increase of 123%
- Market capitalization increase of \$788,185,696





### Moderna



Name - Moderna, Inc.

Ticker - MRNA



messenger therapeutics

**Core Business Operations –** Moderna, Inc. is a biotechnology company focused on drug discovery and drug development based on messenger RNA. The company creates synthetic mRNA that can be injected into patients to help them create their own therapies.

**Announcement Date –** February 25<sup>th</sup>, 2020 (after trading hours on the 24<sup>th</sup>)

**Announcement Summary –** Moderna announced that it has released the first batch of mRNA-1273, the Company's vaccine against the novel coronavirus, for human use. Vials of mRNA-1273 have been shipped to the National Institute of Allergy and Infectious Diseases (NIAID), a part of the National Institutes of Health (NIH) to be used in the planned Phase 1 study in the U.S.



### Moderna



### Market Value Impact from Day Prior to Announcement (2/24) to 5-day VWAP

- Share price increase of \$8.35
- Share price percentage increase of 45%
- Market capitalization increase of \$2,746,491,066





## **NanoViricides**



Name - NanoViricides, Inc.

Ticker - NNVC



**Core Business Operations –** NanoViricides is a global leader in the development of nanomedicine drugs against viruses. The company's unique nanoviricide® platform technology defines a novel mechanism enabling first-in class drugs against viruses.

Announcement Date - January 30th, 2020

**Announcement Summary –** Nanoviricides is confirming public disclosures in articles by various industry journals and other articles, that it is working on developing a treatment for the novel coronavirus 2019-nCoV, or the Wuhan coronavirus. The company will need support from governmental and international agencies such as the US CDC, WHO, and Chinese CDC to successfully develop these treatments, however, at this time, the Company does not have a collaboration with any of these agencies.

Source: Barron's



### **NanoViricides**



#### Market Value Impact from Day Prior to Announcement (1/29) to 5-day VWAP

- Share price increase of \$3.98
- Share price percentage increase of 42%
- Market capitalization increase of \$29,519,095





### Novavax



Name - Novavax, Inc.

Ticker - NVAX



**Core Business Operations –** Novavax is a clinical-stage biotechnology company committed to delivering novel products to prevent a broad range of infectious diseases, using innovative proprietary recombinant nanoparticle vaccine technology

Announcement Date - February 26th, 2020

**Announcement Summary –** Novavax announced progress in its efforts to develop a novel vaccine to protect against coronavirus disease COVID-19. Novavax has produced and is currently assessing multiple nanoparticle vaccine candidates in animal models prior to identifying an optimal candidate for human testing, which is expected to begin by the end of spring 2020.



### Novavax



### Market Value Impact from Day Prior to Announcement (2/25) to 5-day VWAP

- Share price increase of \$4.47
- Share price percentage increase of 56%
- Market capitalization increase of \$230,452,306





### Vaxart



Name - Vaxart, Inc.

Ticker - VXRT



**Core Business Operations –** Vaxart is focused on the discovery, development, and commercialization of oral recombinant vaccines administered using temperature-stable tablets that can be stored and shipped without refrigeration, eliminating the need for needle injection.

Announcement Date - March 18th, 2020

Announcement Summary – Vaxart announced that it has entered into an agreement with Emergent BioSolutions Inc., whereby Emergent will deploy its molecule-to-market contract development and manufacturing (CDMO) services to help develop and manufacture Vaxart's experimental oral vaccine candidate for coronavirus disease (COVID-19). Vaxart's oral recombinant vaccine candidate is based on its proprietary VAAST™ platform.

Source: BioSpace 107



### Vaxart



### Market Value Impact from Day Prior to Announcement (3/17) to 5-day VWAP

- Share price increase of \$0.19
- Share price percentage increase of 10%
- Market capitalization increase of \$9,757,049





# Vir Biotechnologies



Name - Vir Biotechnologies, Inc.

Ticker - VIR



**Core Business Operations –** Vir Biotechnologies is a clinical-stage immunology company focused on combining immunologic insights with cutting-edge technologies to treat and prevent serious infectious diseases.

Announcement Date - February 25th, 2020

**Announcement Summary –** Vir Biotechnology and WuXi Biologics announced a development and manufacturing collaboration to advance and produce human monoclonal antibodies for the potential treatment of COVID-19 (Coronavirus Disease 2019). Under the terms of the agreement, the companies will work together on the clinical development, manufacturing, and commercialization of Vir's proprietary antibodies.

Source: Barron's







Market Value Impact from Day Prior to Announcement (2/24) to 5-day VWAP

- Share price increase of \$28.77
- Share price percentage increase of 152%
- Market capitalization increase of \$3,155,320,483



### **Valuation Outputs**



# Results Summary



Overall, larger companies tended to experience a more significant stock appreciation from pursuing a COVID-19 therapeutic when compared to smaller, less capable companies

Company	Drug Modality	Stage of Development	Percent Change in Share Price	Market Cap as of 3/26	Market Cap Change Due to Announcement	Market Cap Attributed to COVID-9 Program
BioNTech	Vaccine	Preclinical	71%	\$15,100,000,000	\$6,448,095,919	43%
Moderna	RNA-based vaccine	Phase 1	45%	\$10,400,000,000	\$2,746,491,066	26%
Vir Biotechnology	Treatment	Preclinical	152%	\$5,500,000,000	\$3,155,320,483	57%
Inovio Pharmaceuticals	DNA-based vaccine	Preclinical	123%	\$974,000,000	\$788,185,696	81%
Novavax	Vaccine	Preclinical	56%	\$606,000,000	\$230,452,306	38%
Vaxart	Vaccine	Preclinical	10%	\$86,900,000	\$9,757,049	11%
Bellerophon	Drug Delivery System	Phase 2	372%	\$82,400,000	\$57,830,054	70%
NanoViricides	Treatment	Preclinical	42%	\$35,600,000	\$29,519,095	83%
Heat Biologics	Vaccine	Preclinical	152%	\$35,500,000	\$30,720,674	87%
Averages		114%	\$3,646,711,111	\$1,499,596,927	55%	

Source: Yahoo Finance

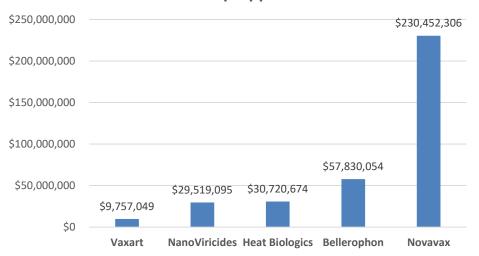






Destum focused on a select group of companies with similar capital restraints, development and commercial capabilities, and industry backing

#### **Market Cap Appreciation**



- Based on the criteria outlined below, the five companies that are most comparable to DSS experienced an average increase in market capitalization of \$72 million, which Destum considers to be the most accurate and supportable representation of valuation
- Capital Restraints: No large cash reserves or ability to service significant amounts of debt
- Development & Commercial Capabilities: Limited or out-sourced development capabilities with no commercial infrastructure currently in place
- Industry Backing: No publicized industry partnerships or collaborations, and minimal funding commitment from relevant government agencies at time of announcement



## **COVID-19 Treatment Value**



Based on the market appreciation experienced by comparable companies, Destum believes the value of developing a treatment for COVID-19 to be approximately ~\$72 million

- In the absence of reliable and reasonably accurate patient and drug pricing information, Destum chose to value pursuing development of a COVID-19 treatment through identifying the value public investors attributed to it in the form of market capitalization appreciation despite recent market volatility
- In order to further refine the valuation, additional considerations were made to those companies included in the calculation such as market cap, established industry presence and public partnerships or collaborations
- The average market cap increase for these select companies based on a 5-day post-announcement volume weighted average price increase was approximately \$72 million which Destum believes to be the most supportable valuation of DSS committing to developing a COVID-19 treatment
- As the landscape for treatment constantly changes, various factors could have significant implications on this value, including, among others, additional treatments gaining approval or a rapid decline in incidence

Value of Equivir for COVID-19



\$72 million

## **Equivir - Influenza**



## Disease Background



Influenza (flu) is an acute contagious respiratory illness caused primarily by types A and B of the influenza virus, which are responsible for seasonal flu epidemics each year

- There are four types of influenza viruses: influenza A, B, C, and D, but only influenza A and B viruses cause clinically important human disease and seasonal epidemics<sup>1</sup>
- The World Health Organization estimates that approximately one billion people are infected and up to 500,000 people die from influenza each year (90% of which will be 65 and older)<sup>2</sup>
- Most people who get flu will recover in a few days, but some people will develop complications (such as pneumonia) as a result of flu, which can be life-threatening and result in death
- In 2017 in the U.S. alone, influenza was estimated to cost the healthcare system approximately \$10.4 billion in direct costs for hospitalizations and outpatient visits<sup>3</sup>
- Antiviral medications and Vaccines are the primary agents used to help prevent and treat influenza

#### Neurological Febrile convulsions\* Reves syndrome\* Meningitis/encephalitis Transverse myelitis Guillain-Barré syndrome Cardiac Pericarditis Myocarditis Exacerbation of cardiovascular disease Respiratory Otitis media\* Croup\* Sinusitis/bronchitis/pharyngitis Pneumonia (viral, or secondary bacterial) Exacerbation of chronic lung disease Pregnancy Increased maternal complications Increased infant perinatal mortality Increased risk of prematurity Smaller neonatal size Lower birth weight Musculoskeletal Mvositis Rhabdomyolysis \*More common in children

COMPLICATIONS

BMJ 2016;355:i6258



## Influenza Vaccination



### The simplest way to prevent contracting seasonal influenza is to get an annual vaccination

Company	Vaccine	Vaccine Type	Age	U.S. Commercial Cost	
	Afluria Quadrivalent	Quadrivalent IIVs (IIV4s)	All Ages	\$20.56	
Seqirus (CSL)	Flucelvax Quadrivalent	Quadrivalent IIVs (IIV4s)	>4 years old	\$30.76	
	Fluad	Trivalent IIV (IIV3s)	>65 years old	Medicare	
CCV	Fluarix Quadrivalent	Quadrivalent IIVs (IIV4s)	All Ages	\$16.05	
GSK	FluLaval Quadrivalent ID	Quadrivalent IIVs (IIV4s)	All Ages	\$15.05	
	Fluzone Quadrivalent	Quadrivalent IIVs (IIV4s)	All Ages	\$16.15	
Sanofi Pasteur	Fluzone High-Dose	Trivalent IIV (IIV3s)	>65 years old	Medicare	
	Flublok Quadrivalent	Quadrivalent RIV (RIV4)	>18 years old	\$16.15	
AstraZeneca (MedImmune)	FluMist Quadrivalent	Live Attenuated Influenza Vaccine (LAIV4)	2-49 years old	\$23.70	

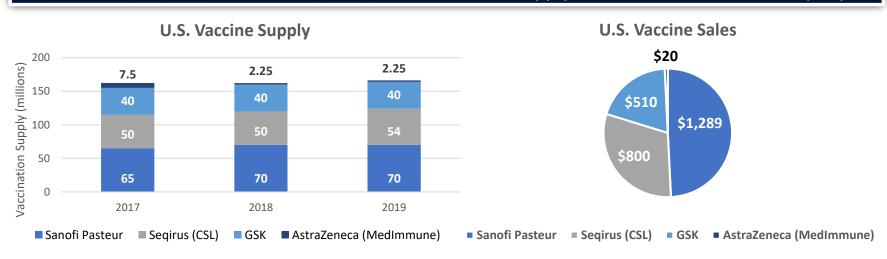
- Flu vaccination can reduce flu illnesses, doctors' visits, and missed work and school due to flu, as well as
  prevent flu-related hospitalizations
- The CDC and Centers for Medicare & Medicaid Services (CMS) recommend vaccines from four manufacturers
- Vaccine sales from these four companies represent the majority of the global vaccine market
- Approximately 81% of the projected vaccine supply for the 2019-2020 flu season will be quadrivalent with trivalent constituting the remaining supply
- 1) Centers for Disease Control & Prevention
- 2) RedBook Drug Pricing



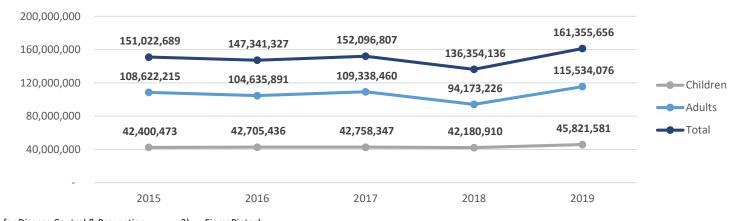




The top four influenza vaccine manufacturers control the vast majority of the U.S. market, based on the number of annual U.S. vaccinations and supply of vaccines from each company



#### **Annual U.S. Vaccinations**



<sup>1)</sup> Centers for Disease Control & Prevention

FierceBiotech

4) Company Annual Reports

<sup>2)</sup> Company Press Releases



### **Antiviral Treatments**



### The CDC recommends antiviral products from four different manufacturers for the chemoprophylaxis and treatment of both influenza A and B

#### **Branded Products** U.S. Commercial Cost<sup>2</sup> Antiviral Agent<sup>1</sup> **Company** Use **Approval** Age \$152 Any Age 1999 Treatment Oral oseltamivir Genentech (Tamiflu®) Chemo-prophylaxis 3 months or older 7 years or older Treatment \$59 1999 Inhaled zanamivir GSK (Relenza®) Chemo-prophylaxis 5 years or older Intravenous peramivir Segirus (CSL) Treatment 2 years or older \$950 2014 (Rapivab®) Genentech/ Oral baloxavir 12 years or older Treatment \$150 2018 (Xofluza®) Shionogi

- The primary differentiation in antiviral treatment has historically been route of administration until the recent approval of Xofluza®
- Another area of distinct importance is the patient group eligible for treatment, as up to 75% of patients are asymptomatic and many well-bodied patients are able to recover without prescription medication

2) RedBook Drug Pricing

<sup>1)</sup> Centers for Disease Control & Prevention



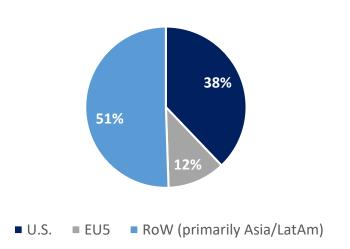
## **Antiviral Market**



Although a number of products are FDA approved, oseltamivir (Tamiflu®) has consistently controlled the majority of the market due to its efficacy, convenience and low cost

#### **Global Sales of Antiviral Molecules** \$1,200 \$975 \$980 \$1,000 \$734 \$716 \$800 \$675 \$600 \$400 \$48 \$55 \$20 \$28 \$39 \$200 \$20 \$22 \$22 \$15 \$23 \$0 2013 2014 2015 2016 2017 **o**seltamivir **—**zanamivir peramivir

#### **Average Market Contribution (2013 - 2017)**



- Oseltamivir is the current leader in influenza antiviral sales by a large margin in part because of its oral dosing, low cost and broad use potential as both a treatment and prophylaxis regimen in a wide range of patients including infants, elderly and immunocompromised\*
- As a branded product though, Tamiflu® saw its global sales decline from \$734 million in 2013 to \$377 million in 2019 with U.S. sales plummeting 75% from 2018 to 2019 to just \$43 million, with the approval of generics
- Genentech hoped its newly licensed product Xofluza® would help steady sales with its one dose over one day convenience, however, cheaper alternatives and worries of viral resistance have led the product to haul in just \$13 million in U.S. sales in 2018 and \$8 million in 2019

**Roche Annual Reports** 

**IQVIA** 

**EndPoints News** 

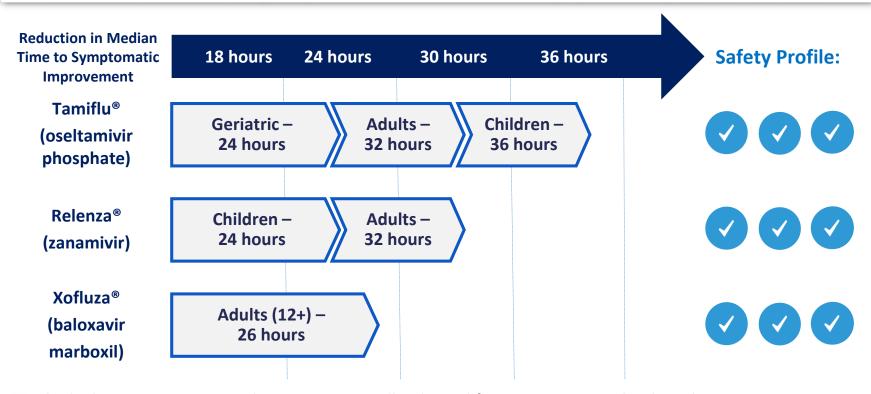
Xofluza® Jefferies Analyst Report



## Treatment Efficacy



Any label expansion allowing treatment after 48 hours of symptom onset would likely be difficult to achieve, and also marginally beneficial since influenza symptoms only last 72 - 96 hours



- The highest grossing antiviral treatments are all indicated for use in patients that have been symptomatic no longer than 48 hours, however, any expansion of this time frame would be marginally beneficial since influenza patients are typically only symptomatic for 72 – 96 hours
- In addition, all drugs displayed above are safe and well tolerated with convenient dosing regimens

<sup>1)</sup> ClinicalTrials.gov

<sup>2)</sup> Centers for Disease Control & Prevention



### **Unmet Medical Need**



The one area in antiviral treatment that could see room for growth would be elderly and immunocompromised populations that other drugs have historically been ineffective in

#### **Product Comparable:**

- Xofluza® was originally approved in October 2018 for the treatment of influenza in uncomplicated patients
   12 years and older¹
  - One year later, Shionogi and Roche were granted a label expansion in October 2019 after running additional clinical trials, to include people at high-risk of flu complications
  - This "high-risk" group includes those over 65 years old, immuno-compromised patients and patients with existing conditions like asthma, heart disease, blood disorders, obesity and postpartum women<sup>2</sup>
- Despite targeting a vulnerable patient population, U.S. turnover has struggled compared to its predecessor, Tamiflu®, and sales in its originating country of Japan where it made ~\$92 million in Q3 of 2018 have declined 96% year-over-year to just ~\$3.7 million in Q3 of 2019³
  - Analysts attribute this to inventory mismanagement, along with a decreasing level of physician prescribing<sup>4</sup>

#### Rationale:

- Destum believes that antiviral treatment of uncomplicated patients regardless of age will be difficult to gain
  any meaningful market share in considering the low cost, efficacy and familiarity physicians have with generic
  oseltamivir, however, the high-risk population could be viable
- Although Xofluza® has struggled to hit expectations thus far, the healthcare cost of influenza is still significant and patients still die due to complications of influenza, therefore Destum anticipates that a drug with a novel mechanism of action targeting high-risk patients that is priced appropriately and does not demonstrate high levels of viral resistance could experience some market uptake

<sup>1)</sup> ClinicalTrials.gov

<sup>2)</sup> Product Labels

FiercePharma

## Market Assessment



## Clinical Development



Based on the below clinical and regulatory plan, Destum estimates launch in H2 2024; Total clinical, regulatory, and manufacturing costs estimate ~\$45M (prior to pre-launch activities)



- Clinical trial design, size and length benchmarked to Tamilfu® and Xofluza® development pathways
- Estimated cost per patient of \$10,000 assuming rapid recruitment and short study duration
- Estimated \$5,000,000 in initial launch costs primarily associated with marketing

2) Product Labels

<sup>1)</sup> ClinicalTrials.gov







There are only a handful of programs in late stage development for the treatment of influenza

Company	Drug	Indication	Administration	Phase of Development	Trial Size	Trial Length
1 & 1	pimodivir + oseltamivir (SOC)	Treatment of Influenza A in High-risk Individuals Ages 13+ within 72 hours	Oral	Phase 3 NCT03381196	720 (worldwide)	1.5 years
Materia Medica	MMH-407	Treatment of Influenza in Uncomplicated Individuals Ages 18-65 within 24 hours	Oral	Phase 3 NCT04250311	314 (only in Russia)	2 years
Guangdong Raynovent Biotech	ZSP1273	Treatment of Influenza in Uncomplicated Individuals Ages 18-65 within 48 hours	Oral	Phase 2 NCT04024137	400 (only in China)	6 months

- Johnson & Johnson received pimodivir through a worldwide licensing deal struck in 2014 with Vertex and was granted fast track designation for the program in 2017<sup>3</sup>
  - Pimodivir is positioned as a second line defense against viral restraint strains of influenza A in high-risk individuals
  - Upon its approval, its use in combination could further bolster the dominance of oseltamivir and provide exposure of pimodivir to physicians to increase awareness

**Product Labels** 



### Addressable Market



Equivir would be positioned as an alternative to other influenza antiviral therapies in uncomplicated patients and patients with high risks of complications

## Influenza Symptomatic Patients

U.S. – 32,704,177

 Destum utilized annual CDC data from 2015 to 2019 to approximate the average number of symptomatic individuals each year in the U.S.<sup>1</sup>



U.S. – 15,304,070

- Destum utilized the same data set from the CDC to approximate how many annual medical visits there are due to influenza-like symptoms
- According to the data provided, around 47% of those with influenza symptoms will seek medical consultation<sup>1</sup>

Antiviral Prescriptions
Written for Influenza

U.S. - 3,280,000

- A study was conducted from 2003 to 2012 to determine the average number of influenza antiviral prescriptions dispensed from pharmacies
- Based on a total of 32.8 million prescriptions written, it is estimated that 3.28 million antiviral prescriptions are written each year, implying just over 20% of medical visits result in a prescription<sup>2, 3, 4</sup>

<sup>1)</sup> Centers for Disease Control & Prevention

<sup>2)</sup> Pharmacotherapy. 2015 Nov;35(11):991-7.

B) IQVIA

<sup>4)</sup> Redbook Drug Pricing



## **Product Pricing**



Destum believes an average price of \$130/Rx to be an appropriate benchmark for the product, based on previously approved, orally available antiviral therapies

Product	Tamiflu® (oseltamivir phosphate)	<b>Relenza</b> ® (zanamivir)	<b>Rapivab®</b> (peramivir)	Xofluza® (baloxavir marboxil)	
Company	Genentech	GSK	Seqirus (CSL)	Genentech/Shionogi	
Drug Class	neuraminidase inhibitor	neuraminidase inhibitor	neuraminidase inhibitor	cap-dependent endonuclease inhibitor	
Administration	Oral Capsule	Inhaled Powder	IV Infusion	Oral Capsule	
Indication	prophylaxis and treatment of influenza A & B	prophylaxis and treatment of influenza A & B	treatment of influenza A & B	treatment of influenza A & B	
Average WAC	\$152 <sup>1</sup>	\$59 <sup>1</sup>	\$950 <sup>1</sup>	\$150 <sup>2</sup>	
Approval	1999	1999	2014	2018	

- With the approval of generic oseltamivir in 2016, patients can now get safe and effective antiviral treatment for less than \$10, and in some cases for free, depending on insurance coverage
- Based on the recent pricing challenges faced by Xofluza®, a WAC price of \$130 per treatment could help negotiate favorable coverage, but would likely still be considered expensive in the eyes of physicians

<sup>1)</sup> RedBook Drug Pricing

FiercePharma, Roche Statement.

## **Commercial Forecast**







ASSUMPTION	METRIC	RATIONALE / SOURCE		
Forecast Period	H2 2020 – H2 2037 (18 years)	Based on typical 20-year composition of matter patent life with 2 years deducted for preclinical work		
Symptomatic Incidence	US = 32,704,177 (2020) (Incidence = 1% annually)	Source: Centers for Disease Control & Prevention Incidence could drop into negative territory if vaccinated population outweighs population growth		
Medical Visits	US = 15,304,070 (2020)	Source: Centers for Disease Control & Prevention Approximately 47% of patients will consult with a physician		
Antiviral Prescriptions Written	US = 3,280,000 (2020)	Source: Pharmacotherapy. 2015 Nov;35(11):991-7. Roughly 1/5 patients will receive an antiviral prescription		
Patient Adherence	100% adherence	Treatment will likely consist of single use tablet or short term dosing schedule		
Total U.S. Addressable Population	US = 3,280,000 (2020)	Stratified based on above assumptions		
Market Penetration	~10% peak penetration	Benchmarked to sales of alternative treatment options, as well as, market share of comparable products		
Pricing	US = \$130/treatment course (will not increase over time)	Source: RedBook Pricing, Roche Press Release Tamiflu® price did not increase over 20 years so inflation will be considered		







EXPENSE	ASSUMPTION	RATIONALE / SOURCE			
Gross-to-Net Calculation (rebates, etc.)	30% of Sales	Based on Cortellis equity research reports and low cost nature of competitive products			
COGS	5% of WAC Price	Target COGS based on acceptable industry standards			
SG&A and Marketing	20% of Sales	Industry Standard for Specialized Sales Force			
Distribution	2% of Sales	Industry Standard			
Legal & Consulting	2% of Sales	Industry Standard			
Pharmacovigilance	1% of Sales	Industry Standard			
Corporate Tax Rate	21%	U.S. Federal Corporate Tax Rate			



### **Discount Rate**



Destum utilized a discount rate of 10% when calculating total rNPV for Equivir

$$\mathcal{K}_e = \mathcal{K}_{rf} + \mathcal{S}(\mathcal{K}_m - \mathcal{K}_{rf})$$
10% = 2.1% + .85 (11% - 2.1%)

- Discount rate was computed using the Capital Asset Pricing Model (CAPM) to capture company (β) and market (Km & Krf) risk
- The market premium is the expected return on an investment minus the risk free rate (Krf), which is based on the interest rate of a 10-year U.S. Treasury bill
- Beta (β) was determined through benchmarking comparable publically traded companies (right)

Industry Competitor	Beta
GSK	.68
Roche	.96
Shionogi	.92
Average Beta	.85



## Clinical Risk Assessment



132

Based on its current stage of development there is a 17% chance Equivir will achieve FDA approval

Front	9	Cumulative Success*			
Event	BIO <sup>1</sup> Nature <sup>2</sup>		Industry Average	Cumulative Success	
IND Filing to Phase 1	-	-	92%	17%	
Phase 1 to Phase 2	70%	66%	68%	18%	
Phase 2 to Phase 3	43%	46%	45%	27%	
Phase 3 to NDA Filing	73%	65%	69%	60%	
NDA Filing to Approval	89%	85%	87%	87%	

- Single Event Success rates reflect industry average probabilities of successfully completing clinical trials in infectious diseases
- \*Cumulative success refers to the probability of successfully completing all events in sequence (17% chance of achieving FDA approval based on Equivir's current stage of development)

2) Nat Biotech. 2014; 13: 419-431

**BIO 2015 Clinical Development Success Rates** 



## U.S. Commercial Forecast



U.S. Forecast	2024*	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Symptomatic	34,032,097	34,372,418	34,716,142	35,063,304	35,413,937	35,768,076	36,125,757	36,487,015	36,851,885	37,220,404	37,592,608	37,968,534	38,348,219	38,731,701
Medical Visit	15,925,477	16,084,731	16,245,579	16,408,034	16,572,115	16,737,836	16,905,214	17,074,266	17,245,009	17,417,459	17,591,634	17,767,550	17,945,226	18,124,678
Prescriptions Written	3,413,181	3,447,313	3,481,786	3,516,604	3,551,770	3,587,288	3,623,161	3,659,392	3,695,986	3,732,946	3,770,275	3,807,978	3,846,058	3,884,519
Equivir Market Share	2%	4%	6%	8%	9%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Equivir Rx Written	34,132	137,893	208,907	281,328	319,659	358,729	362,316	365,939	369,599	373,295	377,028	380,798	384,606	388,452
Price per Treatment	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130
Gross Revenue	\$4,437,135	\$17,926,027	\$27,157,932	\$36,572,681	\$41,555,709	\$46,634,740	\$47,101,087	\$47,572,098	\$48,047,819	\$48,528,297	\$49,013,580	\$49,503,716	\$49,998,753	\$50,498,741
Net Revenue	\$3,105,995	\$12,548,219	\$19,010,552	\$25,600,877	\$29,088,996	\$32,644,318	\$32,970,761	\$33,300,469	\$33,633,473	\$33,969,808	\$34,309,506	\$34,652,601	\$34,999,127	\$35,349,119

<sup>\*</sup>Launch in H2

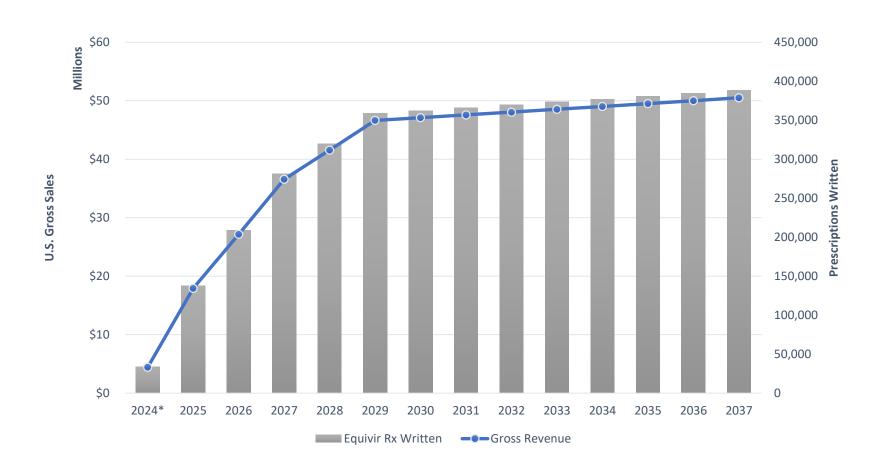
- Based on an average annual U.S. antiviral market of \$334 million and assuming oseltamivir accounts for 90% of other prescriptions written with zanamivir, peramivir and amantadine accounting for the remainder<sup>1</sup>
- The transition of Tamiflu® to OTC use, the increasing compliance with vaccination and the rising number of treatment alternatives are all factors that could negatively impact these projections







### Graphical representation of U.S. unit and revenue forecast



## **Valuation Outputs**







Due to the uncertainty surrounding epidemiology reported outside of the U.S., Destum has chosen to extrapolate based off the U.S. rNPV and worldwide sales of antiviral treatments

Global Sales Distribution of Antiviral Medication											
Region	2013	2014	2015	2016	2017	Average					
U.S.	37%	39%	38%	34%	41%	38%					
EU5	13%	10%	13%	12%	10%	12%					
Rest of World (primarily Asia/LatAm)	50%	50%	49%	55%	49%	50%					

### Risk-adjusted Net Present Value of Equivir over Time:

	H2 2020	H1 2021	H2 2021	H1 2022	H2 2022	H1 2023	H2 2023	H1 2024	H2 2024	H1 2025	H2 2025	H1 2026	H2 2026
U.S.	\$2.49	\$3.38	\$5.65	\$7.93	\$22.92	\$31.53	\$58.80	\$74.17	\$103.78	\$112.76	\$114.80	\$116.93	\$117.38
EU5	\$0.78	\$1.07	\$1.78	\$2.50	\$7.24	\$9.96	\$18.57	\$23.42	\$32.77	\$35.61	\$36.25	\$36.93	\$37.07
RoW	\$3.27	\$4.44	\$7.43	\$10.43	\$30.15	\$41.49	\$77.37	\$97.59	\$136.56	\$148.37	\$151.05	\$153.85	\$154.45
Total	\$6.54	\$8.89	\$14.87	\$20.86	\$60.30	\$82.98	\$154.74	\$195.19	\$273.11	\$296.74	\$302.09	\$307.71	\$308.90

<sup>\*</sup>figures shown in \$millions

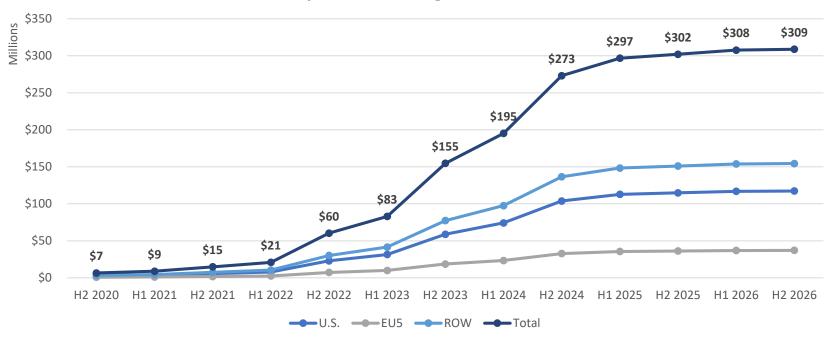


# Risk-adjusted Net Present Value



The value of Equivir continues to increase over time from its **present value of \$6.5 million** as clinical risk and R&D costs are eliminated

#### **Equivir rNPV Change over Time**



rNPV of Equivir in Influenza



\$6.5 million







Although it is encouraging to see major pharma engaged in antiviral licensing activities, the news of Tamiflu® moving to OTC use will surely make competition in the space more fierce

Date	Licensor	Licensee	Financials	Deal Summary
January 2019	Cocrystal Pharma	Merck	Undisclosed upfront and royalties Up to \$156 million in milestones	Exclusive license and collaboration agreement with Merck to discover and develop certain proprietary influenza A/B antiviral agents. Merck will fund research and development for the program, including clinical development, and will be responsible for worldwide commercialization of any products derived from the collaboration.
July 2019	Novartis	Gilead	Undisclosed upfront and royalties Up to \$291 million in milestones	Gilead Sciences struck a deal with Swiss pharma giant Novartis for three preclinical antiviral programs aimed at the treatment of human rhinovirus, influenza and herpes viruses. Gilead will acquire the exclusive rights to develop and commercialize the novel small molecules against three undisclosed targets.
July 2019	Roche	Sanofi	Undisclosed	Sanofi said it had signed a deal with Roche Pharmaceuticals to obtain exclusive US OTC rights for the antiviral agent Tamiflu (oseltamivir phosphate). The pending switch of Tamiflu from prescription to OTC status will augment accessibility of this effective antiviral, allowing patients to initiate therapy to prevent or treat the influenza virus early on.

<sup>1)</sup> Cortellis

<sup>2)</sup> Company Press Releases

Laetose (Sweet Sense)







Global sugar production is at historically high levels, feeding a \$140 billion refined sugar market

	Global Raw Sugar Production <sup>1</sup>											
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017			
Volume (million metric tons)	153.4	162.2	172.4	177.8	175.9	177.4	164.7	170.8	179.6			
Pounds (millions)	338,188.7	357,589.4	380,076.5	392,069.6	387,770.6	391,143.7	363,189.1	376,571.1	396,037.9			

Market Segment	Sugar Pricing <sup>2</sup>	Potential Market Size
U.S. Raw Sugar (the price U.S. producers receive for unrefined sugar)	26.60 cents/pound	\$105,346,091,189
U.S. Refined (the price U.S. food manufacturers and grocery stores pay for U.S. refined sugar)	35.25 cents/pound	\$139,603,372,722
U.S. Retail (the price U.S. grocery stores charge shoppers after their markup)	64.03 cents/pound	\$253,583,090,933

Proposed Market Segment for Laetose

2) Sugar Alliance Pricing 2018

Annual Global Sugar Production. Statista. 2009-2017.







### Although many alternative sweeteners are available, none have demonstrable health benefits

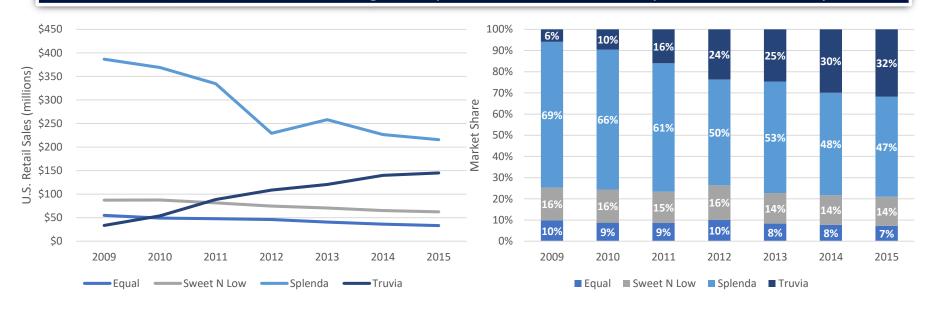
Company	Primary Ingredient	Product	Source
Cargill	Steviol glycosides obtained through fermentation	EverSweet™	Natural
Cargill	Erythritol	Erythritol	Natural
Cargill	Stevia	Truvia®	Natural
Celanese	Acesulfame K	Sunett®	Artificial
Chromocell	Undisclosed	Flavor Promoters™	Natural
Cumberland Packing Corporation	Cumberland Packing Corporation Saccharin		Artificial
Guilin Layn Natural Ingredients Monk fruit (luo han guo) extract		Mogroside V	Natural
Heartland Food Products Group	Sucralose	SPLENDA®	Artificial
Merisant	Aspartame	Equal®	Artificial
Miraculex Miraculin, "miracle fruit" protein		No Product Name	Artificial
Natur Research Ingredients	Natur Research Ingredients Brazzein protein from the African oubli plant		Natural
Senomyx	Various	Sweetmyx®	Artificial



# Sweetener Market Dynamics



Although increased consumer awareness about nutrition is driving a decline in global sweetener sales, Truvia<sup>®</sup> has shown the growth potential of a sweetener perceived as healthy



- Equal®, Sweet N Low, Splenda® and Truvia® are the four marketed sugar substitutes with the largest percent of sweetener market share in the U.S., which between them, is estimated to be worth approximately \$455 million
- Truvia® represents a unique situation where a relatively new market entrant that has been rapidly adopted
  due to its natural sourcing, similarity in taste to sugar and diminished health risks
- As the sweetener market is contracting, the growth of Truvia<sup>®</sup> has come at the expense of other available alternatives like Splenda<sup>®</sup>, which boast less appealing product profiles



## **Product Profile Comparison**



Laetose is a natural sweetener with a superior taste profile compared to Stevia, that not only is well-suited for cooking and baking, but also has potentially beneficial health effects

	saccharin (Sweet n Low)	aspartame (Equal®)	ace-K (Sunett®)	Sucralose (Splenda®)	stevia (Truvia®)	Laetose
FDA GRAS Approval	1958	1981	1988	1998	2008	✓
Maintains sweetness when heated	✓	×	✓	✓	<b>√</b> *	✓
Aftertaste	×	×	×	✓	$\checkmark$	×
Approved uses	Tabletop sweetener, baked foods	Tabletop sweetener	Food & beverage	Tabletop sweetener, cooking & baking	Tabletop sweetener, cooking & baking	Tabletop sweetener, cooking & baking
Source	Artificial	Artificial	Artificial	Artificial	Natural	Natural

<sup>\*</sup>Stevia requires a different formulation for baking

- Companies have long searched for a sugar substitute that can mimic the taste of tabletop sugar without the associated calories and negative metabolic effects
- Laetose, with its unique formulation agent, is able to achieve an almost identical taste to sugar while mitigating its health risks
- In addition, Laetose maintains a competitive advantage in that it is cheaply sourced in comparison to Stevia which must be grown and extracted in a relatively costly process



## Market Position & Pricing



Based upon a comprehensive analysis of competitor pricing, Destum assumes a price of \$.21 per ounce for wholesale distribution and \$.60 - .90 per ounce for retail sales



- Laetose is projected to be sold at wholesale prices to large food and beverage manufacturers, as well as at retail prices to individual consumers
  - The intended use for Laetose in the wholesale setting would be as an additive to existing food and beverage products, versus a tabletop and health-conscious sweetener in the retail space
- The wholesale price of Laetose represents a discount from sweetener averages due to its inexpensive ingredients, while the retail price is at a slight premium because of its novel status and branding

## **Commercial Assumptions**

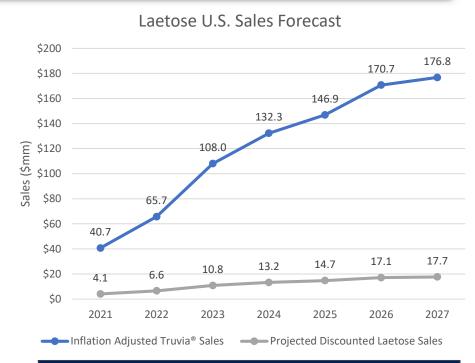


### **Commercial Forecast**



# Destum chose to benchmark U.S. sales of Laetose off of Truvia® with a significant discount applied to account for various synergies Cargill and Truvia® possess that Laetose does not

- Destum chose to use Truvia<sup>®</sup> as a benchmark for Laetose sales in the U.S.
- Rationale for using Truvia®:
  - Natural sugar substitute
  - Fewer health risks than artificial sweeteners
  - Recent launch
  - Same market segment/space
- Destum adjusted the figures to account for inflation over the forecast period at a rate of 2%
- A discount was then applied to sales to adjust for a lack of commercial infrastructure or existing customer base, uncertainty surrounding intellectual property and the viability of being able to make any health claims on the product label



U.S. Truvia Sales (\$mm)								
2009	2010	2011	2012	2013	2014	2015		
33.4	53.9	88.6	108.5	120.5	140	145		
2021	2022	2023	2024	2025	2026	2027		
40.7	65.7	108.0	132.3	146.9	170.7	176.8		

Inflation Adjusted Sales (hypothetical)





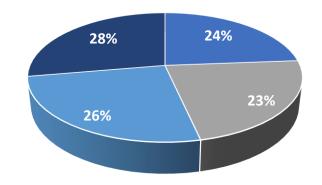


Destum utilized global sales data from industry reports and company filings to project sales in North America, Latin America, Asia-Pacific, as well as Europe, the Middle East, and Africa (EMEA)

- Regional sales vary significantly among sweetener products and are fundamentally impacted by concentration of marketing efforts and established supply chain locations
- In response to the unavailability of worldwide sales data for Truvia<sup>®</sup> Destum leveraged stevia sales volume by global region generally, as well as, sales of stevia producer, PureCircle, as proxies
- Based on an average of the two, global sales volume of stevia is relatively similar amongst the major global regions

### **Average Stevia Sales Volume by Region**





Global Region	PureCircle Stevia Sales <sup>1</sup>	Stevia Sales Volume <sup>2</sup>	Average Stevia Sales*
Asia-Pacific	14%	33%	24%
North America	16%	30%	23%
Latin America	26%	25%	26%
EMEA	44%	12%	28%

<sup>1)</sup> PureCircle Annual Report, 2017.

<sup>\*</sup>will not add up to 100% due to rounding



### Laetose Forecast



Destum Partners has projected a potential revenue forecast for Laetose based on the sales assumptions previously discussed and cost margins similar to industry standards

	Projected Laetose Sales (millions)							
	2020	2021	2022	2023	2024	2025	2026	2027
North America	\$0.00	\$4.07	\$6.57	\$10.80	\$13.23	\$14.69	\$17.07	\$17.68
Latin America	\$0.00	\$4.60	\$7.43	\$12.21	\$14.95	\$16.60	\$19.29	\$19.98
Asia-Pacific	\$0.00	\$4.25	\$6.86	\$11.27	\$13.80	\$15.33	\$17.81	\$18.44
EMEA	\$0.00	\$4.96	\$8.00	\$13.15	\$16.10	\$17.88	\$20.78	\$21.52
Global Sales	\$0.00	\$17.88	\$28.85	\$47.43	\$58.08	\$64.50	\$74.94	\$77.62
COGS	\$0.00	\$10.55	\$17.02	\$27.98	\$34.27	\$38.06	\$44.22	\$45.79
Operating Expenses	\$0.00	\$4.65	\$7.50	\$12.33	\$15.10	\$16.77	\$19.48	\$20.18
Other	\$0.00	\$0.54	\$0.87	\$1.42	\$1.74	\$1.94	\$2.25	\$2.33
Interest Expense	\$0.00	\$0.36	\$0.58	\$0.95	\$1.16	\$1.29	\$1.50	\$1.55
Taxes	\$0.00	\$0.38	\$0.61	\$1.00	\$1.22	\$1.35	\$1.57	\$1.63
Net Income	\$0.00	\$1.41	\$2.28	\$3.75	\$4.59	\$5.10	\$5.92	\$6.13

Margins	Coca-Cola	Pepsi	Tate & Lyle	Celanese	PureCircle	Average
COGS	39%	45%	70%	76%	63%	59%
Operating Expenses	37%	38%	22%	9%	25%	26%
Other	7%	2%	3%	3%	0%	3%
Interest Expense	2%	1%	1%	2%	5%	2%
Net Income	12%	9%	5%	12%	7%	9%

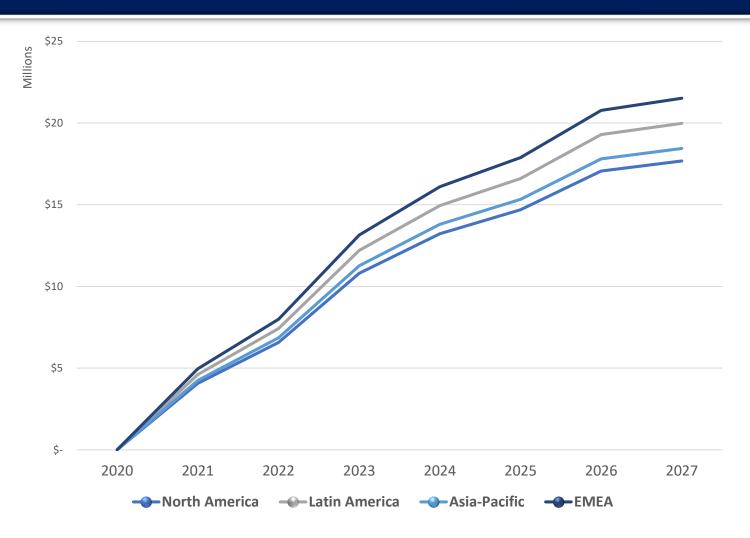
<sup>\*</sup>Margins averaged from company's 10K financials 2015-2017







## Graphical representation of Laetose regional sales projections



# **Valuation Outputs**







# Analysis of food & beverage acquisitions from 2017-2018 result in an average Enterprise Value:Sales multiple of 1.4x

Date	Acquirer	Target	Transaction Value (\$mm)	EV/Sales
Feb 2018	EnWave USA	nutraDRIED	1.8	0.6x
Feb 2018	Colt Corp	Crystal Rock Holdings	35.4	0.6x
Feb 2018	Total Produce	Dole Food Company	300	0.4x
Dec 2017	GreenSpace	Galaxy Nutritional Foods	16.9	1.0x
Nov 2017	Maple Leaf Foods	Field Roast Grain Meat Co.	120	3.2x
Nov 2017	Tyson	Original Philly Holdings	236	1.7x
Nov 2017	Freiburger USA	Richelieu Foods	435	1.3x
Nov 2017	Unilever	Tazo Tea	384	3.4x
Nov 2017	Saputo	Betin	263.9	2.3x
Oct 2017	Hormel	Columbus Manufacturing	850	2.8x
Oct 2017	Cooke	Omega Protein	508.7	1.4x
Oct 2017	Warabeya	Prime Deli	7.4	0.4x
Aug 2017	Utz	Inventure Foods	142.7	0.5x
Aug 2017	Farmer Bros	Boyd Coffee Co.	58.6	0.6x
Jul 2017	Innophos	Novel Ingredients	125.1	1.3x
		Averages	232.4	1.4x

L) Capital IC

Company Filings

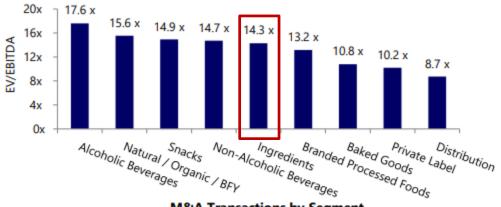


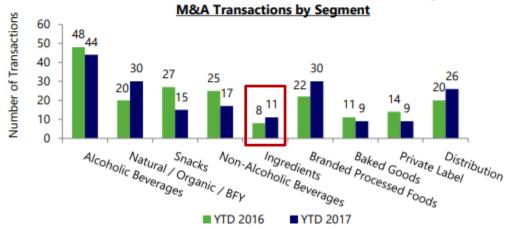




Analysis of ingredient company acquisitions from 2016-2017 result in an average Enterprise Value: EBITDA multiple of 14.3x

### Food & Beverage Public Company Average EBITDA Multiples by Segment





2) Capstone Partners Research

Capital IO



# **Discount Rate**



An extra percentage was applied to the end of the standard discount rate to account for additional risk associated with small, pre-revenue companies

$$\mathcal{K}_e = \mathcal{K}_{rf} + \mathcal{S}(\mathcal{K}_m - \mathcal{K}_{rf})$$
13% = 2.9% + 1.25 (11% - 2.9%)

- Discount rate was computed using the Capital Asset Pricing Model (CAPM) to capture company (β) and market (Km & Krf) risk
- The market premium is the expected return on an investment minus the risk free rate (Krf), which is based on the interest rate of a 10-year U.S. Treasury bill
- Beta (β) was determined through benchmarking comparable publically traded companies (right)

Comparable Company	Beta <sup>3</sup>
Senomyx	1.28
PureCircle	1.33
Innophos	1.13
Average Beta	1.25

<sup>1)</sup> Historic S&P 500 returns

<sup>3)</sup> Barrons Financial

# Valuation via Transaction Multiples Security Wise. Brand SMART.

Laetose has a discounted present value of \$30 million when using the average valuation derived from the EV/Sales and EV/EBITDA multiples

			Proj	jected Laetos	e Sales (milli	ons)		
	2020	2021	2022	2023	2024	2025	2026	2027
Global Sales	\$0.00	\$17.88	\$28.85	\$47.43	\$58.08	\$64.50	\$74.94	\$77.62
COGS	\$0.00	\$10.55	\$17.02	\$27.98	\$34.27	\$38.06	\$44.22	\$45.79
Operating Expenses	\$0.00	\$4.65	\$7.50	\$12.33	\$15.10	\$16.77	\$19.48	\$20.18
Other	\$0.00	\$0.54	\$0.87	\$1.42	\$1.74	\$1.94	\$2.25	\$2.33
EBITDA	\$0.00	\$2.15	\$3.46	\$5.69	\$6.97	\$7.74	\$8.99	\$9.31
Interest Expense	\$0.00	\$0.36	\$0.58	\$0.95	\$1.16	\$1.29	\$1.50	\$1.55
Taxes	\$0.00	\$0.38	\$0.61	\$1.00	\$1.22	\$1.35	\$1.57	\$1.63
Net Income	\$0.00	\$1.41	\$2.28	\$3.75	\$4.59	\$5.10	\$5.92	\$6.13
		_						

NPV of Laetose \$30M

Discounted using a rate of 19%

14.3x

\$133

\$109



# Using a discounted cash flow methodology combined with a perpetuity terminal value, the NPV of Laetose equals \$31 million

	Projected Laetose Sales (millions)								
	2020	2021	2022	2023	2024	2025	2026	2027	
Global Sales	\$0.00	\$17.88	\$28.85	\$47.43	\$58.08	\$64.50	\$74.94	\$77.62	
COGS	\$0.00	\$10.55	\$17.02	\$27.98	\$34.27	\$38.06	\$44.22	\$45.79	
Operating Expenses	\$0.00	\$4.65	\$7.50	\$12.33	\$15.10	\$16.77	\$19.48	\$20.18	
Other	\$0.00	\$0.54	\$0.87	\$1.42	\$1.74	\$1.94	\$2.25	\$2.33	
EBITDA	\$0.00	\$2.15	\$3.46	\$5.69	\$6.97	\$7.74	\$8.99	\$9.31	
Interest Expense	\$0.00	\$0.36	\$0.58	\$0.95	\$1.16	\$1.29	\$1.50	\$1.55	
Taxes	\$0.00	\$0.38	\$0.61	\$1.00	\$1.22	\$1.35	\$1.57	\$1.63	
Net Income	\$0.00	\$1.41	\$2.28	\$3.75	\$4.59	\$5.10	\$5.92	\$6.13	

## NPV of Future Cash Flows \$17.03M



NPV of Perpetuity \$14.39M



DCF NPV of Laetose \$31.42M

- Uses EBITDA as a proxy for Free Cash Flow
- Assumes a discount rate of 19% over 8 years

- Utilizes a long-term growth rate of 2.5% based on historic U.S. GDP growth
- Assumes a discount rate of 19% over 8 years

Multiples NPV of Laetose \$30.07M

Average NPV of Laetose \$30.75M

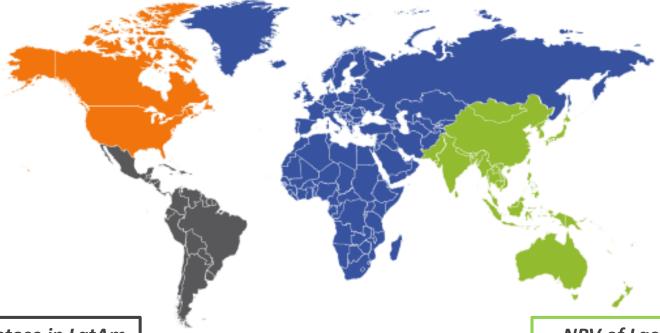


# NPV Geographic Distribution



Allocation of value between North America, Latin America, EMEA and Asia-Pacific

NPV of Laetose in NA \$7.07M NPV of Laetose in EMEA \$8.61M



NPV of Laetose in LatAm \$7.99M NPV of Laetose in AP \$7.38M







Sensitivity analysis shows the effect of changes to discount rate and annual revenue on NPV

		% Change in Global Revenue									
	(millions)	-20%	-10%	0%	10%	20%					
	10%	\$56.69	\$63.77	\$70.86	\$77.94	\$85.03					
a)	13%	\$40.84	\$45.94	\$51.04	\$56.15	\$61.25					
nt Rate	16%	\$31.17	\$35.07	\$38.97	\$42.86	\$46.76					
Discount Rate	19%	\$24.60	\$27.67	\$30.75	\$33.82	\$36.89					
	22%	\$19.84	\$22.32	\$24.80	\$27.28	\$29.76					
	25%	\$16.26	\$18.29	\$20.32	\$22.36	\$24.39					

Values displayed are an average NPV calculated by the EV/Sales multiple, EV/EBITDA multiple, and DCF valuation methods

**3F (Functional Fragrance Formula)** 

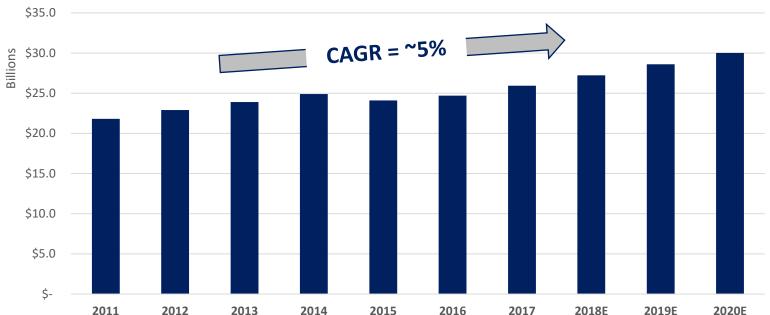






The global flavor and fragrance market is projected to grow to over \$30 billion by 2020





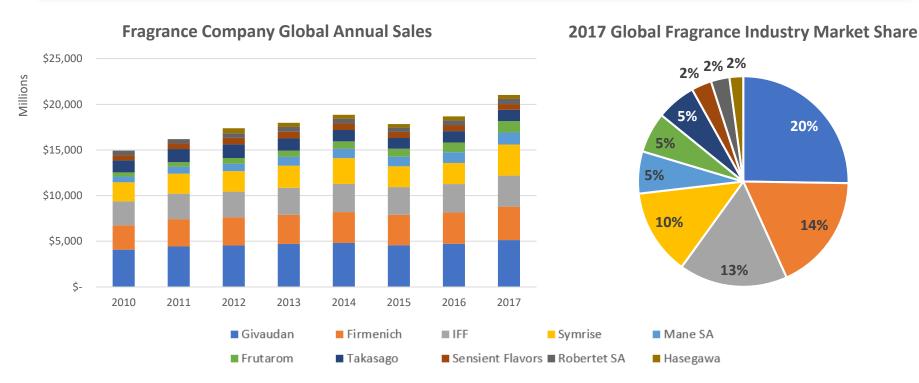
- The global fragrance market is estimated to grow annually at a rate of ~5 % over the next five years
- Growth is expected to be driven primarily by the rise of niche, natural fragrances, high levels of disposable income amongst consumers and global accessibility through online retail services







The fragrance market has historically been one of consolidation, with the top four companies controlling over 50% of the market



- Givaudan, Firmenich, IFF and Symrise maintain control of the vast majority of market share through internal innovation of new scent technology, novel product in-licensing and outside acquisition opportunities
  - E.g. International Flavors and Fragrances (IFF) \$7.1B acquisition of market contender Frutarom







Although pure fragrances have done well on their own historically, functional fragrances and essential oils are becoming more common as companies realize their commercial potential

Company	Product	Key Ingredient	Function	Source
Aromaflage	Aromaflage Repellent	Orange Peel Oil, Cedarwood Oil & Vanillin	Insect Repellent	Natural
Coqui Coqui	Coqui Coqui	Geranium & Citronella	Insect Repellent	Natural
Evolva	Evenootkatone	Nootkatone	Insect Repellent	Natural
Intelligent Nutrients	Smart Armor	Rosemary & Peppermint	Insect Repellent	Natural
Laboratory of Flowers	Immunity Therapeutic Perfume	Clove, Lemon, Cinnamon, Eucalyptus & Frankincense	Antiviral/Antibacterial	Natural
Lotus Wei	Radiant Energy Elixir	Piñon Pine & Sage	Antiviral/Antiseptic	Natural
Red Flower	Guaiac Organic Perfume	Guaiac Wood	Antiviral	Natural
REMIX by Giselle Wasfie	Weed Bug Repellent + Cologne	Various including: orange, lemon, jasmine, rose and sandalwood	Insect Repellent	Natural
Shen-Beauty	Un-stung Hero	IR3535	Insect Repellent	Artificial
Victoria's Secret	Bombshell Eau de Parfum	Unknown	Insect Repellent	Natural

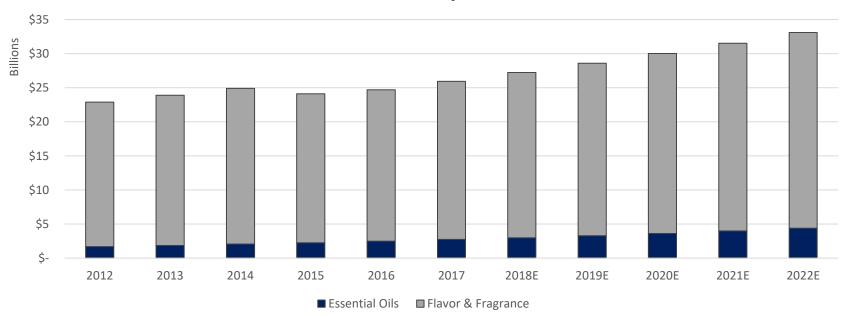






The essential oils market represents a relatively small, but meaningful and high growth segment of the overall flavor and fragrance industry

## **Essential Oils Industry Contribution**



- Based on industry projections and market research reports, the essential oils market is anticipated to nearly double its proportion of the flavor & fragrance market from 2012 to 2022, from 8 to 15 percent
- This trend accurately reflects the change in consumer preference from cheap, artificially synthesized products to premium, naturally-sourced, environmentally friendly products

L) Essential Oils Market Report. Grandview Market Research

<sup>2)</sup> Flavor & Fragrance Market. Edelweiss Investment Research

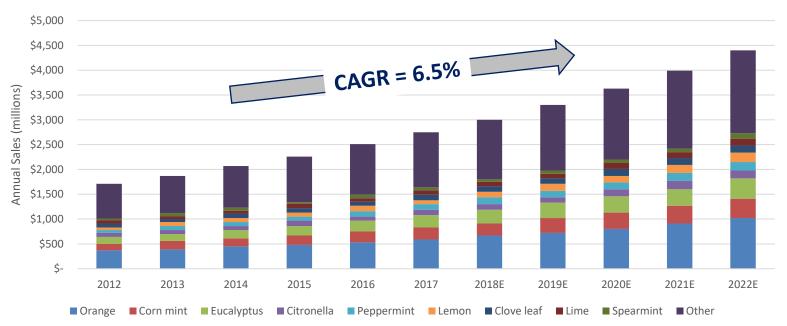


## U.S. Essential Oils Market



The market value of essential oils in the U.S. is projected to grow to over \$4 billion by 2022

## Market Value of Essential Oils in the U.S.



- Increasing applications in aromatherapy coupled with rising demand for fragrances and flavors in food & beverages and personal care is expected to drive essential oils market growth over the forecast period
- Numerous overall health benefits associated with essential oils are anticipated to drive the product demand in medical and pharmaceutical applications as well



# **Product Comparison**



Citronella Oil, a widely used essential oil, has many functional properties that enable its use in a variety of products from insect repellents to dish soap

#### **Overview:**

- Extracted primarily from Lemongrass
- EPA-approved safety profile
- GRAS approved ingredients:
  - Citronellol
  - Citronellal
  - Geraniol
  - Limonene
- Various formulations



#### **Common Uses:**

- Insect Repellent
- Anti-microbial (Anti-biotic, Antiparasitic, Anti-fungal)
- Perfume & Fragrance Additive
- Cleaning Supplies
- Toiletries & Personal Care
- Aromatherapy

#### **Additional Notes:**

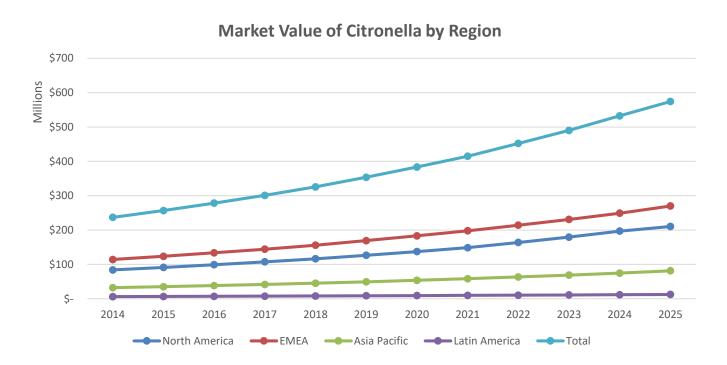
- Despite being the subject of hundreds of published studies, Citronella Oil is unable to make claims about its
  effectiveness as an insect repellent or cleaning component
- Still its main use is as a functional additive in unregulated products that have generally accepted uses

<sup>1)</sup> Oil of Citronella. National Pesticide Information Center.

Malar J. 2011; 10(Suppl 1): S11.

Oil of Citronella Fact Sheet, U.S. EPA.

Through a variety of end product uses, the global market value of Citronella Oil is expected to exceed \$500 million by 2024



- The global market value of citronella oil is projected to grow annually at an average rate of 9.7%
- Therapeutics, aromatherapy and production of food & beverage products are expected to remain the three
  most prominent applications of citronella oil, accounting for more than half of global value

1) Essential Oils Market Report. Grandview Market Research

**Commercial Assumptions** 



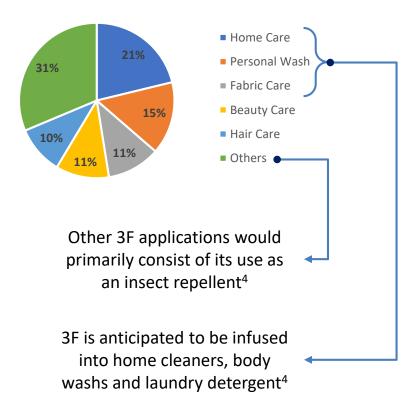




Destum chose to benchmark global sales of 3F off of Citronella Oil sales with refinements made to adjust for end product use and differences in product profiles

- Destum chose Citronella Oil as a benchmark for annual sales and anticipated market growth
- Rationale for using Citronella Oil:
  - Similar Application Spectrum (insect repellent & antimicrobial)
  - Naturally-derived
  - GRAS Approved
  - Unable to Market Effectiveness
- Sales were then categorized by end market use and appropriately scaled to the particular markets
   3F would be primarily positioned in
- The market penetration rate attempted to take into account the lack of consumer awareness of 3F compared to Citronella Oil, lower than expected efficacy in mosquito repellency (as judged by traditional arm-in-box methodology), pending intellectual property and the potential need for registration with the EPA<sup>1,2</sup>

## **Key End Markets for Fragrances**<sup>3</sup>



Firmenich Independent Lab Testing

Flavor & Fragrance Market. Edelweiss Investment Research

Market Feedback







Destum chose to benchmark global sales of 3F off of Citronella Oil sales with refinements made to adjust for end product use and potential regulatory hurdles



Oil	Home/Personal/Fabric Care	\$180.23	\$194.95	\$212.54	\$230.36	\$250.27	\$269.87	\$290.53	\$312.78
	Other	\$1.19	\$2.57	\$4.21	\$7.60	\$11.55	\$16.02	\$23.00	\$30.94
	Market Share	1%	2%	3%	5%	7%	9%	12%	15%
3F	Home/Personal/Fabric Care	\$1.80	\$5.85	\$14.88	\$27.64	\$42.55	\$59.37	\$78.44	\$100.09
	Market Share	1%	3%	7%	12%	17%	22%	27%	32%

\$19.08

\$35.24

\$54.10

\$75.39

**Total 3F Sales** 

\$2.99

\$8.42

\$131.03

\$101.44

<sup>\*</sup>figures listed above in millions



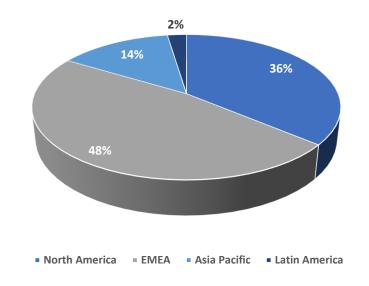
# Global Sales Distribution



Destum utilized regional revenue distribution of Citronella Oil to allocate sales between North America, Latin America, Asia-Pacific, as well as Europe, the Middle East, and Africa (EMEA)

- Europe represents the largest market due to strong fragrance brand heritage and consumer preference for natural products
- Companies are now looking towards emerging markets, specifically Africa and Southeast Asia, as primary drivers of growth
- The growing populations of India and China are commonly identified as the most promising market opportunities
- Destum believes the forecast to be supported by alternative independent benchmarks as well:
  - Edison analyst report for stating peak sales of \$140-150 million for Evolva's competing products, Resveratrol and Nootkatone<sup>2</sup>
  - At a median functional fragrance price of \$28.13/unit<sup>3</sup> and 4 million units<sup>4</sup> 3F would bring in ~\$113 million

## **Global Revenue Distribution of Citronella Oil**



Essential Oils Market Report. Grandview Market Research

Average of various functional fragrance prices

<sup>2)</sup> Evolva. Edison Analyst Report. 2018







Destum Partners has projected a potential revenue forecast for 3F based on the sales assumptions previously discussed and cost margins similar to industry standards

	Projected 3F Sales (millions)									
	2020	2021	2022	2023	2024	2025	2026	2027		
North America	\$1.08	\$3.04	\$6.89	\$12.73	\$19.54	\$27.23	\$36.64	\$47.33		
EMEA	\$1.42	\$4.00	\$9.07	\$16.75	\$25.72	\$35.83	\$48.22	\$62.28		
Asia-Pacific	\$0.42	\$1.18	\$2.67	\$4.92	\$7.56	\$10.53	\$14.17	\$18.30		
Latin America	\$0.07	\$0.20	\$0.45	\$0.84	\$1.29	\$1.80	\$2.42	\$3.12		
Global Sales	\$2.99	\$8.42	\$19.08	\$35.24	\$54.10	\$75.39	\$101.44	\$131.03		
COGS	\$1.70	\$4.80	\$10.88	\$20.09	\$30.84	\$42.97	\$57.82	\$74.69		
Operating Expenses	\$0.75	\$2.11	\$4.77	\$8.81	\$13.53	\$18.85	\$25.36	\$32.76		
Other	\$0.09	\$0.25	\$0.57	\$1.06	\$1.62	\$2.26	\$3.04	\$3.93		
EBITDA	\$0.45	\$1.26	\$2.86	\$5.29	\$8.12	\$11.31	\$15.22	\$19.66		
Interest Expense	\$0.00	\$0.01	\$0.03	\$0.05	\$0.08	\$0.11	\$0.15	\$0.20		
Taxes (21% tax rate)	\$0.09	\$0.26	\$0.60	\$1.10	\$1.69	\$2.35	\$3.16	\$4.09		
Net Income	\$0.35	\$0.99	\$2.24	\$4.13	\$6.35	\$8.84	\$11.90	\$15.37		

Margins	Givaudan	IFF	Symrise	Takasago	Sensient	Average
cogs	52%	53%	52%	64%	62%	57%
Operating Expenses	24%	24%	28%	27%	19%	25%
Interest Expense	1%	2%	2%	0%	1%	1%
Net Income	14%	12%	9%	4%	8%	9%

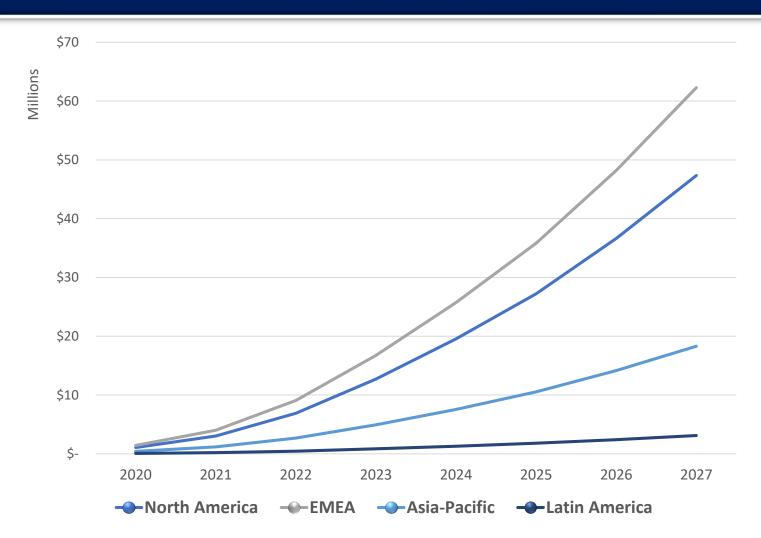
<sup>\*</sup>Margins averaged from company's 10K financials 2015-2017







## Graphical representation of 3F regional annual sales projections



**Valuation Outputs** 







# Analysis of fragrance acquisitions from 2013-2017 result in a median transaction value of \$100M and an EV/Sales multiple of 2.4x

Acquirer	Target	Transaction Value (\$mm)	EV/Sales	Target Description	Year
IFF	Fragrance Resources	138	1.8x	Founded in 1987, Fragrance Resources is a privately-held, family-owned fragrance company.	2017
Frutarom	Sonarome	29	2.4x	Sonarome, which was founded in 1981, engages in the development, production and marketing of flavors and fragrances.	2015
Givaudan	Induchem	93	3.1x	Induchem's portfolio of products is based on a wide range of innovative and highly functional active ingredients with proven efficacy results.	2015
IFF	Lucas Meyer	312	6.9x	Lucas Meyer Cosmetics is well known for its innovative ingredients, especially active and functional ingredients, in the cosmetics and personal care industry.	2015
Givaudan	Soliance	37	1.5x	Soliance provides innovative cosmetic solutions to its international clients and partners and develops high added-value active ingredients, derived from vegetable sources, microorganisms and microalgae.	2014
IFF	Aromor	103	2.9x	Aromor is engaged in the development, production and marketing of Natural, Natural Identical and Synthetic high added value aroma and flavors ingredients for the perfume, cosmetics and food industries.	2014
Symrise	Belmay	100	1.7x	The Belmay Grp, headquartered in Yonkers, New York, is an established and renowned developer and manufacturer of fragrance creations, particularly in the segments fine fragrances, cosmetics and air care.	2013
M	ledian	100	2.4x		

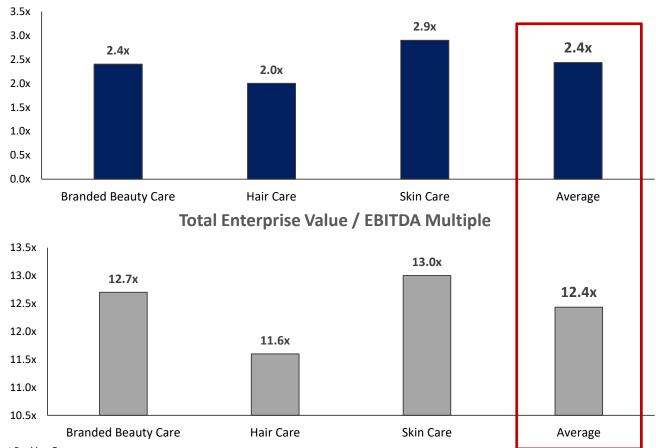






Further analysis confirms an EV/Sales multiple of 2.4x and an EV/EBITDA multiple of 12.4x

## **Total Enterprise Value / Sales Multiple**





# **Discount Rate**



An extra percentage was applied to the end of the standard discount rate to account for additional risk associated with small, pre-revenue companies

$$\mathcal{K}_{e} = \mathcal{K}_{rf} + \mathcal{S}(\mathcal{K}_{m} - \mathcal{K}_{rf})$$
12.8% = 2.9% + 1.23 (11% - 2.9%)

- Discount rate was computed using the Capital Asset Pricing Model (CAPM) to capture company (β) and market (Km & Krf) risk
- The market premium is the expected return on an investment minus the risk free rate (Krf), which is based on the interest rate of a 10-year U.S. Treasury bill
- Beta (β) was determined through benchmarking comparable publically traded companies (right)

Comparable Company	Beta <sup>3</sup>
Evolva	1.23

1) Historic S&P 500 returns

3) Yahoo Financial

2) KPMG Valuation Practices. 2017.

# Valuation via Transaction Multiples Security Wise. Brand Smart.

# 3F has a discounted present value of \$78 million and \$61 million when using the EV/Sales and EV/EBITDA multiples, respectively

				Projected	3F Sales (mill	ions)		
	2020	2021	2022	2023	2024	2025	2026	2027
Global Sales	\$2.99	\$8.42	\$19.08	\$35.24	\$54.10	\$75.39	\$101.44	\$131.03
COGS	\$1.70	\$4.80	\$10.88	\$20.09	\$30.84	\$42.97	\$57.82	\$74.69
Operating Expenses	\$0.75	\$2.11	\$4.77	\$8.81	\$13.53	\$18.85	\$25.36	\$32.76
Other	\$0.09	\$0.25	\$0.57	\$1.06	\$1.62	\$2.26	\$3.04	\$3.93
EBITDA	\$0.45	\$1.26	\$2.86	\$5.29	\$8.12	\$11.31	\$15.22	\$19.66
Interest Expense	\$0.00	\$0.01	\$0.03	\$0.05	\$0.08	\$0.11	\$0.15	\$0.20
Taxes (21% tax rate)	\$0.09	\$0.26	\$0.60	\$1.10	\$1.69	\$2.35	\$3.16	\$4.09
Net Income	\$0.35	\$0.99	\$2.24	\$4.13	\$6.35	\$8.84	\$11.90	\$15.37



2.4x



# Using a discounted cash flow methodology combined with a perpetuity terminal value, the NPV of 3F equals \$53 million

	Projected 3F Sales (millions)								
	2020	2021	2022	2023	2024	2025	2026	2027	
Global Sales	\$2.99	\$8.42	\$19.08	\$35.24	\$54.10	\$75.39	\$101.44	\$131.03	
COGS	\$1.70	\$4.80	\$10.88	\$20.09	\$30.84	\$42.97	\$57.82	\$74.69	
Operating Expenses	\$0.75	\$2.11	\$4.77	\$8.81	\$13.53	\$18.85	\$25.36	\$32.76	
Other	\$0.09	\$0.25	\$0.57	\$1.06	\$1.62	\$2.26	\$3.04	\$3.93	
EBITDA	\$0.45	\$1.26	\$2.86	\$5.29	\$8.12	\$11.31	\$15.22	\$19.66	
Interest Expense	\$0.00	\$0.01	\$0.03	\$0.05	\$0.08	\$0.11	\$0.15	\$0.20	
Taxes (21% tax rate)	\$0.09	\$0.26	\$0.60	\$1.10	\$1.69	\$2.35	\$3.16	\$4.09	
Net Income	\$0.35	\$0.99	\$2.24	\$4.13	\$6.35	\$8.84	\$11.90	\$15.37	

## NPV of Future Cash Flows \$22.4M



NPV of Perpetuity \$30.4M



*DCF NPV of 3F* \$52.7M

- Uses EBITDA as a proxy for Free Cash Flow
- Assumes a discount rate of 19% over 8 years

- Utilizes a long-term growth rate of 2.5% based on historic U.S. GDP growth
- Assumes a discount rate of 19% over 8 years

Multiples NPV of 3F \$69..4M

Average NPV of Laetose \$63.9M

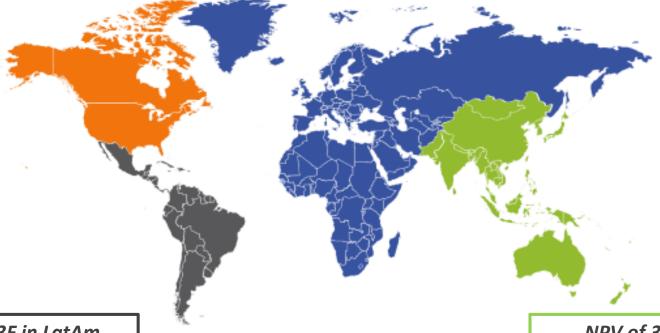


# NPV Geographic Distribution



Allocation of value between North America, Latin America, EMEA and Asia-Pacific

NPV of 3F in NA \$23.06M NPV of 3F in EMEA \$30.35M



NPV of 3F in LatAm \$1.52M NPV of 3F in AP \$8.92M



# Sensitivity Analysis

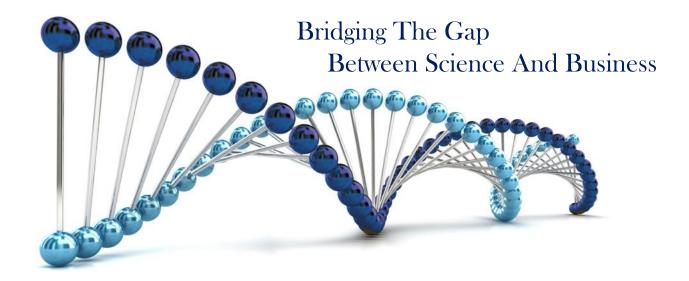


Sensitivity analysis shows the effect of changes to discount rate and annual revenue on NPV

		% Change in Annual Revenue							
		-20%	-10%	0%	10%	20%			
Discount Rate	10%	\$115.5	\$122.9	\$130.3	\$137.7	\$145.1			
	13%	\$91.1	\$97.1	\$103.1	\$109.1	\$115.1			
	16%	\$75.6	\$80.5	\$85.4	\$90.3	\$95.2			
	19%	\$64.8	\$68.9	\$63.8	\$76.9	\$80.9			
	22%	\$56.9	\$60.2	\$63.5	\$66.9	\$70.2			
	25%	\$50.9	\$53.6	\$56.4	\$59.2	\$61.9			

<sup>\*</sup>All values listed in millions

Values displayed are an average NPV calculated by the EV/Sales multiple, EV/EBITDA multiple, and DCF valuation methods



# APPENDIX B IFA LETTER



#### W CAPITAL MARKETS PTE. LTD.

Incorporated in the Republic of Singapore)
(Company Registration Number: 201813207E)
65 Chulia Street
#43-01 OCBC Centre
Singapore 049513

4 June 2020

The Independent Directors
Singapore eDevelopment Limited (the "Company")
7 Temasek Boulevard #29-01B
Suntec Tower One
Singapore 038987

#### THE PROPOSED US\$50 MILLION SHARE SWAP

Unless otherwise defined or the context otherwise requires, all capitalised terms herein shall have the same meanings attributed to them in the circular issued to the shareholders of the Company ("Shareholders") dated 4 June 2020 (the "Circular").

#### 1. INTRODUCTION

- 1.1 The Company has announced on 16 March 2020, the entry into a legally binding term sheet dated 12 March 2020 (the "Term Sheet") between Global BioMedical Pte. Ltd. ("Global BioMedical"), a wholly-owned direct subsidiary of the Company, Impact BioMedical, Inc. ("Impact BioMedical"), a wholly-owned direct subsidiary of Global BioMedical, Document Security Systems, Inc. ("DSS") and DSS BioHealth Security, Inc. ("DSS BioHealth") in relation to, inter alia:
  - (i) the disposal of 1,000<sup>(1)</sup> ordinary shares in the share capital of Impact BioMedical held by Global BioMedical (the "**Sale Shares**"), representing the entire issued and paid-up share capital of Impact BioMedical, to DSS BioHealth; and
  - (ii) the allotment and issue of 14,500,000<sup>(2)</sup> new common stock in the stock capital of DSS (the "**New DSS Shares**"), representing approximately 18.93% of the total issued and paid-up stock capital of DSS on an enlarged basis comprising 76,586,099 common stock as at 16 March 2020, to Global BioMedical.

#### (the "Proposed US\$50 million Share Swap").

#### Notes:

- (1) Further to the announcement made by the Company on 16 March 2020, Global BioMedical subscribed for, and Impact BioMedical allotted and issued 13,896,069 new ordinary shares in the share capital of Impact BioMedical to Global BioMedical for a total subscription price of US\$2,779,214 (the "Impact BioMedical Subscription"). The total subscription price of US\$2,779,214 represented the outstanding sums due and owing by Impact BioMedical to Global BioMedical. Following the Impact BioMedical Subscription, the number of Sale Shares to be disposed to DSS BioHealth comprises 13,897,069 ordinary shares in the share capital of Impact BioMedical, representing the entire issued and paid-up share capital of Impact BioMedical as at the Latest Practicable Date.
- (2) Further to the announcement made by the Company on 16 March 2020, DSS completed a stock consolidation of every 30 existing common stock in the stock capital of DSS into one consolidated common stock in the stock capital of DSS (the "DSS Stock Consolidation"). Following the DSS Stock Consolidation, the number of New DSS Common Stock to be allotted and issued to Global BioMedical was adjusted accordingly and comprises

483,334 new common stock in the stock capital of DSS, representing approximately 18.87% of the total issued and paid-up stock capital of DSS on an enlarged basis comprising 2,562,021 common stock as at the Latest Practicable Date.

Subsequent to the above announcement, Global BioMedical subscribed for, and Impact BioMedical allotted and issued, 13,896,069 new ordinary shares in the share capital of Impact BioMedical to Global BioMedical for a total subscription price of US\$2,779,214 (the "Impact BioMedical Subscription"). The total subscription price of US\$2,779,214 represented the outstanding sums due and owing by Impact BioMedical to Global BioMedical. Following the Impact BioMedical Subscription, the Sale Shares now comprise 13,897,069 ordinary shares in the share capital of Impact BioMedical which is currently 100% held by Global BioMedical.

In connection thereof, the Company, Global BioMedical, DSS and DSS BioHealth Security entered into a share exchange agreement (the "Share Exchange Agreement") dated 21 April 2020, which was fully executed by the aforesaid parties on 27 April 2020.

DSS is an associate (as defined under the Catalist Rules) of Mr Chan Heng Fai, who is a Director, the Chief Executive Officer and a controlling shareholder of the Company. Accordingly, DSS is an "interested person" under Chapter 9 of the Catalist Rules and the Proposed US\$50 million Share Swap is an "interested person transaction" under Chapter 9 of the Catalist Rules.

The Proposed US\$50 million Share Swap being an interested person transaction under Chapter 9 of the Catalist Rules, the value of which is more than 5% of the Group's latest audited net tangible assets ("NTA"), is therefore conditional upon approval by Shareholders who are deemed independent for the purposes of the Proposed US\$50 million Share Swap as an interested person transaction in an extraordinary general meeting ("EGM") to be convened.

1.3 W Capital Markets Pte Ltd has been appointed by the Company as the independent financial adviser ("IFA") to advise the directors who are considered independent ("Independent Directors") for the purposes of making recommendations to the Shareholders in respect of the Proposed US\$50 million Share Swap, as required under Rule 921(4)(a) of the Catalist Rules. This letter (the "IFA Letter") sets out, *inter alia*, our opinion as to whether the Proposed US\$50 million Share Swap is on normal commercial terms and prejudicial to the interests of the Company and its minority Shareholders. This IFA letter forms part of the Circular issued by the Company to its Shareholders in connection with the Proposed US\$50 million Share Swap.

### 2. TERMS OF REFERENCE

The purpose of this IFA Letter is to provide an independent opinion addressed to the Independent Directors on whether the Proposed US\$50 million Share Swap is on normal commercial terms and whether the Proposed US\$50 million Share Swap is prejudicial to the interests of the Company and its minority Shareholders. We have prepared this IFA Letter pursuant to the requirements of Rule 921(4)(a) of the Catalist Rules as well as for the use of the Independent Directors in connection with their consideration of the Proposed US\$50 million Share Swap and their advice to the Shareholders arising thereof. The recommendations made by the Independent Directors to the Shareholders shall remain the responsibility of the Independent Directors.

We were neither a party to the negotiations entered into by the Company in relation to the Proposed US\$50 million Share Swap, nor were we involved in the deliberations leading up to the decision on the part of the Directors to undertake the Proposed US\$50 million Share Swap. Accordingly, we do not, by this IFA Letter, warrant the merits of the Proposed US\$50 million Share Swap and our terms of reference do not require us to evaluate or comment on the legal, strategic, commercial and financial merits and/or risks (if any) of the Proposed US\$50 million Share Swap.

In the course of our evaluation, we have held discussions with the Directors, the management of the Company (the "Management") and/or their professional advisers and have examined and relied to a considerable extent on publicly available information collated by us as well as information provided and representations made to us, both written and verbal, by the Directors,

the Management and/or their professional advisers, including information contained in the Circular. We have not independently verified such information or representations, whether written or verbal, and accordingly cannot and do not make any representation or warranty, express or implied, in respect of, and do not accept any responsibility for the accuracy, completeness or adequacy of such information or representations. Whilst care has been exercised in reviewing the information on which we have relied on, we have not independently verified the information but nevertheless have made such reasonable enquiries and exercised our judgment on the reasonable use of such information, and have found no reason to doubt the accuracy or reliability of the information. In this regard, we note that the Directors have collectively and individually accepted full responsibility for the accuracy of the information given in the Circular as set out in the "Directors' Responsibility Statement" in Section 6 of the Circular.

The scope of our appointment does not require us to perform an independent evaluation or appraisal of the assets, liabilities and/or profitability of the Company and its subsidiaries (the "Group") and/or the value of the Sale Shares or the DSS New Shares and we do not express a view on the financial position, future growth prospects and earnings potential of the Group after the completion of the Proposed US\$50 million Share Swap in accordance with the terms of the Share Exchange Agreement. As such, where applicable, we have relied on the disclosures and representations made by the Company on the value of the assets and liabilities and profitability of the Group and/or the value of the Sale Shares or the DSS New Shares. In this respect, we have been furnished with, inter alia, (i) a valuation report commissioned by DSS and issued by Destum Partners, Inc. ("Destum Partners") in April 2020 (the "First Valuation Report"); and (ii) a calculations of value report dated 26 May 2020 which was initiated by Impact BioMedical's scientific research partner, GRDG Sciences, LLC (the "Calculations of Value Report", and together with the First Valuation Report shall be referred to herein as the "Valuation Reports"), on the assessed valuation of the intangible assets held by Impact BioMedical. As we are not experts in the valuation of the assets as set out in the Valuation Reports, we have placed sole reliance on the Valuation Reports in relation to the assessed values of the intangible assets held by Impact BioMedical.

The information on which we relied was based upon market, economic, industry, monetary and other conditions prevailing as at the Latest Practicable Date which may change significantly over a relatively short period of time. We assume no responsibility to update, revise or affirm our opinion in light of any subsequent development after the Latest Practicable Date that may affect our opinion contained herein.

In rendering our opinion in relation to the Proposed US\$50 million Share Swap, we have not had regard to the specific investment objectives, financial situation, tax position, tax status, risk profiles or particular needs and constraints or circumstances of any individual Shareholder or specific group of Shareholders. As each Shareholder would have different investment objectives and profiles, we recommend that any individual Shareholder or specific group of Shareholders who may require specific advice in the context of his specific or their investments objectives or portfolio(s) consult his or their legal, financial, tax or other professional adviser.

The Company has been separately advised by its own professional advisers in the preparation of the Circular (other than this IFA Letter). We have had no role or involvement, and do not provide any advice (financial or otherwise), in the preparation, review and verification of the Circular (other than this IFA Letter). Accordingly, we take no responsibility for and express no views, whether express or implied, on the contents of the Circular (other than this IFA Letter).

Our opinion in relation to the Proposed US\$50 million Share Swap should be considered in the context of the entirety of this IFA Letter and the Circular.

# 3. INFORMATION ON IMPACT BIOMEDICAL AND DSS

# 3.1 Information on Impact BioMedical

3.1.1 Impact BioMedical is a company incorporated in Nevada, United States of America on 16 October 2018 and has an issued and paid-up share capital of US\$2,779,214 comprising 13,897,069 ordinary shares as at the Latest Practicable Date and is an indirect wholly-owned subsidiary of the Company held through its wholly-owned subsidiary, Global BioMedical.

Impact BioMedical leverages on its scientific know-how and intellectual property rights to provide solutions that have been plaguing the biomedical field for decades. Impact BioMedical, together with its scientific partners, pledges to undertake a concerted effort in research and development ("R&D"), and drug discovery and development for the prevention, inhibition and treatment of neurological, oncological and immune-related diseases.

- 3.1.2 Since the Company's first venture into the biomedical business in 2017, it had formed joint ventures with biomedical companies and made headway with research in several products in the pipeline including:
  - (i) Linebacker (in which Impact BioMedical owns an effective interest of 63.64%), is a broad-spectrum therapeutic platform to address emerging pandemics such as Alzheimer's, diabetes, cancer, drug-resistant viruses and antibiotics-resistant bacteria and is regulated as a drug. Linebacker is in the pre-clinical trial stage as at the Latest Practicable Date;
  - (ii) Equivir (in which Impact BioMedical owns an effective interest of 63.64%), is a patented medical treatment and preventative drug intended to be used to address a broad range of viruses responsible for deadly infectious diseases and is regulated as a drug. Equivir is in the investigational new drug filing stage as at the Latest Practicable Date;
  - (iii) Laetose (in which Impact BioMedical owns an effective interest of 81.82%), is a breakthrough low-calorie, low glycaemic index, natural, modified sugar which has the potential to affect the world's sugar market. Laetose is a functional sugar that possesses low glycaemic properties which also assists in mitigating inflammatory responses. Laetose has attained the GRAS (generally recognised as safe) designation from the United States Food and Drug Administration (FDA). Laetose is in the process of being patented as at the Latest Practicable Date and is ready for commercialisation but requires market penetration, marketing, branding and an established sales distribution network; and
  - (iv) Functional Fragrance Formulation ("3F") (in which Impact BioMedical owns an effective interest of 63.64%), is a suite of functional fragrances developed for industrial and medical applications to fight mosquito-borne diseases. 3F is expected to be regulated as a pesticide with the United States Environmental Protection Agency. 3F is in the commercialisation stage as at the Latest Practicable Date and requires market penetration, marketing, branding and an established sales distribution network.
- 3.1.3 For the latest financial year ended 31 December 2019, Impact BioMedical has yet to record any revenue and incurred net loss attributable to common stockholders of approximately US\$0.45 million.

# 3.2 Information on DSS

DSS is a company incorporated in New York, United States of America in 1984 and has an issued and paid-up stock capital of US\$119,704,000 comprising 2,078,687 common stock as at the Latest Practicable Date. DSS is listed on the New York Stock Exchange, trading under the symbol "DSS", and is an industry leader in providing innovative anti-counterfeit, authentication and brand protection solutions to protect corporations, financial institutions and governments from counterfeiting and fraud.

Mr Chan Heng Fai, who is a Director, Chief Executive Officer and a controlling shareholder of the Company, holds, directly and indirectly, 765,156 common stock in the stock capital of DSS, representing approximately 36.81% of the total issued and paid-up stock capital of DSS, as at the Latest Practicable Date. Accordingly, DSS is an associate of Mr Chan Heng Fai.

# Financial Information on DSS

Based on the consolidated financial statements of DSS for the financial period ended 31 March 2020 and financial year ended 31 December 2019 ("FY2019") respectively, announced by DSS:

- (a) the NAV and NTA of DSS was approximately US\$14.4 million and US\$11.8 million respectively and DSS had a positive working capital of approximately US\$5.5 million as at 31 March 2020;
- (b) DSS achieved revenue of approximately US\$19.4 million and recorded a net loss of approximately US\$2.89 million in FY2019.

As at the Latest Practicable Date, DSS has a market capitalisation of approximately US\$15.5 million.

# 4. SALIENT INFORMATION RELATING TO THE PROPOSED US\$50 MILLION SHARE SWAP

The following text relating to the salient information relating to the Proposed US\$50 million Share Swap has been extracted from Sections 2.5, 2,7 and 2.8 of the Circular and is set out in italics below.

#### "2.5 Consideration

- 2.5.1 The consideration for the disposal of the Sale Shares to DSS BioHealth is US\$50 million (the "Consideration"). The Consideration shall be paid by allotting and issuing:
  - (a) 483,334 New DSS Common Stock with a stated value of US\$3,132,000 or US\$6.48 per New DSS Common Stock and a par value of US\$0.02 for each New DSS Common Stock; and
  - (b) 46,868 Perpetual Convertible DSS Preferred Stock with a stated value of US\$46,868,000 or US\$1,000 per Perpetual Convertible DSS Preferred Stock and a par value of US\$0.02 for each Perpetual Convertible DSS Preferred Stock. The Perpetual Convertible DSS Preferred Stock shall be convertible into common stock in the stock capital of DSS, provided always that the right of conversion shall not be exercised by Global BioMedical to the extent that Global BioMedical holds more than 19.99% of the total issued and paid-up stock capital of DSS on an enlarged basis after such conversion. Further details on the Perpetual Convertible DSS Preferred Stock are set out in Section 2.8 of this Circular.
- 2.5.2 For the avoidance of doubt, the New DSS Common Stock and the common stock in the stock capital of DSS to be allotted and issued pursuant to the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock shall not be subject to any moratorium requirements.
- 2.5.3 According to the announcement made by the Company on 16 March 2020, the Consideration was arrived at arm's length and on a willing-buyer-willing-seller basis, after taking into account, inter alia, the following:
  - (a) the NLV and NTL value represented by the Sale Shares of approximately S\$3.43 million (equivalent to approximately US\$2.55 million based on an exchange rate as at 31 December 2019 of US\$1: S\$1.3461) as at 31 December 2019 based on the unaudited consolidated financial statements of the Group for FY2019; and
  - (b) the prevailing economic conditions."

# "2.7 Principal Terms of the Share Exchange Agreement

# 2.7.1 Key Conditions

The completion of the disposal of the Sale Shares to DSS BioHealth contemplated under the Share Exchange Agreement is subject to a number of customary conditions. The key conditions include, inter alia, the following:

- (a) The Company having obtained approvals from its Shareholders and DSS having obtained approvals from its stockholders;
- (b) The Company have obtained the requisite approvals from the SGX-ST, if required; and
- (c) Receipt of the audited financials of Impact BioMedical by DSS.

# 2.7.2 Representations and Warranties

The Share Exchange Agreement contains customary representations, warranties and covenants, including representations and warranties from DSS and DSS BioHealth that certain disclosures will be delivered on or before, and that certain statements contained in the Share Exchange Agreement will be correct as at, the date on which the Company makes the Notice of EGM and this Circular available on SGXNET. Likewise, the Company and Global BioMedical represent and warrant that certain disclosures will be delivered on or before, and that certain statements contained in the Share Exchange Agreement will be correct as at, the date on which DSS first files a preliminary proxy statement in connection with a meeting of DSS's stockholders to consider and vote on the transactions contemplated by the Share Exchange Agreement.

#### 2.7.3 Non-competition; Non-solicitation

For a period of five (5) years commencing on the completion date (the "Restricted Period"), neither the Company nor Global BioMedical shall, nor shall any of its affiliates be permitted to, directly or indirectly:

- (a) engage in or assist others in engaging in biomedical sciences research and development for licensing and distribution in the areas of healthcare and consumer products (the "Restricted Business") in the United States of America and its Territories and Possessions (the "Territory");
- (b) have an interest in any individual, corporation, partnership, joint venture, limited liability company, governmental authority, unincorporated organisation, trust, association or other entity ("Person") that engages directly or indirectly in the Restricted Business in the Territory in any capacity, including as a partner, shareholder, member, employee, principal, agent, trustee or consultant; or
- (c) intentionally interfere in any material respect with the business relationships (whether formed prior to or after the date of the Share Exchange Agreement) between any member of Impact BioMedical and its subsidiaries (the "Impact BioMedical Group") and customers or suppliers of any member of the Impact BioMedical Group.

Notwithstanding sub-paragraph (b) above, the Company, Global BioMedical or their affiliates may own, directly or indirectly, solely as an investment, securities of any such Persons that are traded on any national securities exchange if the Company, Global BioMedical and their affiliates are not controlling Persons of, or members of a group which controls, such Persons and do not, in the aggregate own, directly or indirectly, 5% or more of any class of securities of such Persons.

During the Restricted Period, neither the Company nor Global BioMedical shall, nor shall any of its affiliates be permitted to, directly or indirectly, hire or solicit any employee of the Impact BioMedical Group, encourage any such employee to leave such employment, or hire any such employee who has left such employment, except pursuant to a general solicitation which is not directed specifically to any such employees, provided that nothing shall prevent the Company,

Global BioMedical or any of their affiliates from hiring any employee whose employment was terminated by the Impact BioMedical Group or DSS BioHealth.

During the Restricted Period, neither the Company nor Global BioMedical shall, nor shall any of its affiliates be permitted to, directly or indirectly, solicit or entice, or attempt to solicit or entice, any clients or customers of any member of the Impact BioMedical Group or potential clients or customers of any member of the Impact BioMedical Group for purposes of diverting their business or services from any member of the Impact BioMedical Group.

# 2.7.4 Indemnification by Global BioMedical and the Company

Subject to the other terms and conditions of the Share Exchange Agreement, the Company and Global BioMedical shall, jointly and severally, indemnify and defend each of DSS, DSS BioHealth and their affiliates (including each member of the Impact BioMedical Group) and their respective representatives (collectively, the "DSS Indemnitees") against, and shall hold each of them harmless from and against, and shall pay and reimburse each of them for, any and all losses incurred or sustained by, or imposed upon, the DSS Indemnitees based upon, arising out of, with respect to or by reason of:

- (a) any inaccuracy in or breach of any of the representations or warranties of the Company or Global BioMedical contained in the Share Exchange Agreement (other than certain matters as set forth in the Share Exchange Agreement) or in any certificate or instrument delivered by or on behalf of Global BioMedical pursuant to the Share Exchange Agreement, as at the date such representation or warranty was made or as if such representation or warranty was made on and as at the completion date (except for representations and warranties that expressly relate to a specified date, the inaccuracy in or breach of which will be determined with reference to such specified date);
- (b) any breach or non-fulfilment of any covenant, agreement or obligation to be performed by Global BioMedical pursuant to the Share Exchange Agreement; or
- (c) any transaction expenses or indebtedness of any member of the Impact BioMedical Group outstanding as at the completion of the disposal of the Sale Shares to DSS BioHealth.

# 2.7.5 Termination

The Share Exchange Agreement may be terminated at any time prior to the completion of the disposal of the Sale Shares to DSS BioHealth:

- (a) by mutual written consent of Global BioMedical and DSS BioHealth;
- (b) by DSS BioHealth by written notice to Global BioMedical if:
  - (i) DSS BioHealth is not in material breach of any provision of the Share Exchange Agreement and there has been a breach, inaccuracy in or failure to perform any representation, warranty, covenant or agreement made by Global BioMedical pursuant to the Share Exchange Agreement that would give rise to the failure of certain conditions in the Share Exchange Agreement and such breach, inaccuracy or failure has not been cured by Global BioMedical within 10 days of Global BioMedical's receipt of written notice of such breach from DSS BioHealth; or
  - (ii) certain conditions in the Share Exchange Agreement have not been, or if it becomes apparent that any of such conditions will not be, fulfilled by the date that is 180 days after the date of the Share Exchange Agreement, unless such failure shall be due to the failure of DSS BioHealth to perform or comply with any of the covenants, agreements or conditions to be performed or complied with by it prior to the completion of the disposal of the Sale Shares to DSS BioHealth;
- (c) by by written notice from Global BioMedical to DSS BioHealth if:

- (i) Global BioMedical is not in material breach of any provision of the Share Exchange Agreement and there has been a breach, inaccuracy in or failure to perform any representation, warranty, covenant or agreement made by DSS BioHealth pursuant to the Share Exchange Agreement that would give rise to the failure of certain conditions in the Share Exchange Agreement and such breach, inaccuracy or failure has not been cured by DSS BioHealth within 10 days of DSS BioHealth's receipt of written notice of such breach from Global BioMedical; or
- (ii) certain conditions in the Share Exchange Agreement have not been, or if it becomes apparent that any of such conditions will not be, fulfilled by the date that is 180 days after the date of the Share Exchange Agreement, unless such failure shall be due to the failure of Global BioMedical to perform or comply with any of the covenants, agreements or conditions to be performed or complied with by it prior to the completion of the disposal of the Sale Shares to DSS BioHealth:
- (d) by Global BioMedical or DSS BioHealth in the event that (i) any law that makes consummation of the transactions contemplated by Share Exchange Agreement illegal or otherwise prohibited; or (ii) a government authority issues an order restraining or enjoining the transactions contemplated by the Share Exchange Agreement, and such order becomes final and non-appealable;
- (e) by either Global BioMedical or DSS BioHealth if the stockholders of DSS vote on, but fail to approve, the Share Exchange Agreement and the transactions contemplated thereby; or
- (f) by either Global BioMedical or DSS BioHealth if the Shareholders of the Company vote on, but fail to approve, Ordinary Resolution relating to the Proposed US\$50 million Share Swap at the EGM.

# 2.8 Principal Terms of the Perpetual Convertible DSS Preferred Stock

- 2.8.1 According to a certificate of designation (the "Certificate of Designation"):
  - (a) Each Perpetual Convertible DSS Preferred Stock shall be convertible into common stock in the stock capital of DSS, provided always that the right of conversion shall not be exercised by Global BioMedical to the extent that Global BioMedical holds more than 19.99% of the total issued and paid-up stock capital of DSS on an enlarged basis after such conversion (the "Prescribed Conversion Limit").
  - (b) The Perpetual Convertible DSS Preferred Stock are perpetual securities of DSS with no maturity date, save that DSS shall have the right of redemption as disclosed in sub-paragraph (f) below.
  - (c) The Perpetual Convertible DSS Preferred Stock shall have no voting rights, except as required by applicable laws and regulations.
  - (d) No dividends shall accrue or be payable on the Perpetual Convertible DSS Preferred Stock.
  - (e) In the event of any voluntary or involuntary liquidation, dissolution or winding up of DSS, Global BioMedical shall be entitled to be paid out of the assets of DSS available for distribution to its stockholders, before any payment shall be made to holders of the common stock or any other class of securities in the stock capital of DSS, an amount in cash equal to the aggregate liquidation value of all Perpetual Convertible DSS Preferred Stock held by Global BioMedical. Each Perpetual Convertible DSS Preferred Stock shall have a liquidation value of US\$1,000.
  - (f) At any time and from time to time on or after the date of issuance of the Perpetual Convertible DSS Preferred Stock, DSS shall have the right to redeem all or part of the

outstanding Perpetual Convertible DSS Preferred Stock at the liquidation value of US\$1,000 per Perpetual Convertible DSS Preferred Stock by sending a written notice (the "Redemption Notice") to Global BioMedical not less than 30 days before the redemption date. The Redemption Notice shall set out, inter alia, the date upon which Global BioMedical's right of conversion terminates (the "Conversion Election Date") which shall be no earlier than five (5) days before the redemption date. Notwithstanding anything to the contrary, Global BioMedical shall have the right to exercise its right of conversion instead of giving effect to the redemption by DSS but has to do so before the Conversion Election Date.

- 2.8.2 The conversion price for the Perpetual Convertible DSS Preferred Stock is US\$6.48<sup>3</sup> (the "Conversion Price").
  - (a) Adjustment to Conversion Price upon Dividend, Subdivision or Combination

If DSS shall, at any time or from time to time after the date of issuance of the Perpetual Convertible DSS Preferred Stock, (i) pay a dividend or make any other distribution to holders of the common stock or any other class of securities in the stock capital of DSS by way of common stock in the stock capital of DSS, options or convertible securities; or (ii) subdivide (by stock split, recapitalisation or otherwise) the common stock in the stock capital of DSS into a greater number of common stock, the Conversion Price immediately prior to such dividend, distribution or subdivision shall be proportionately reduced. If DSS, at any time or from time to time after the date of issuance of the Perpetual Convertible DSS Preferred Stock, combines (by combination, stock consolidation or otherwise) the common stock in the stock capital of DSS into a smaller number of common stock, the Conversion Price immediately prior to such combination shall be proportionately increased. Any adjustment shall be effective at the close of business on the date the dividend, subdivision or combination becomes effective.

(b) Adjustment to Conversion Price and Common Stock in the Stock Capital of DSS to be Allotted and Issued pursuant to the Exercise of the Right of Conversion of the Perpetual Convertible DSS Preferred Stock upon Reorganisation, Reclassification, Consolidation or Merger.

In the event of any (i) capital reorganisation of DSS; (ii) reclassification of the securities in the stock capital of DSS (other than a change in par value, from par value to no par value, from no par value to par value or as a result of a dividend, subdivision or combination); (iii) consolidation or merger of DSS with or into another individual, corporation, partnership, joint venture, limited liability company, governmental authority, unincorporated organisation, trust, association or other entity ("Person"); (iv) sale of all or substantially all of DSS's assets to another Person; or (v) other similar transaction (other than any transaction covered by sub-paragraph (a) above), which entitles holders of common stock in the stock capital of DSS, in each case, to receive (either directly or upon subsequent liquidation) stock, securities or assets with respect to or in exchange for common stock in the stock capital of DSS, each Perpetual Convertible DSS Preferred Stock shall, immediately after such reorganisation, reclassification, consolidation, merger, sale or other similar transaction, remain outstanding and shall, in lieu of or in addition to (as the case may be) the common stock in the stock capital of DSS to be allotted and issued pursuant to the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock then, be exercisable for the kind and number of stock, securities or assets of DSS or of the successor Person resulting from such transaction to which Global BioMedical would have been entitled upon such reorganisation, reclassification, consolidation, merger, sale or other similar transaction if Global BioMedical had exercised its right of conversion of the Perpetual Convertible DSS Preferred Stock prior to such reorganisation, reclassification, consolidation, merger, sale or other similar transaction and had been allotted and issued the applicable number of common stock in the stock capital of DSS pursuant to the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock (without

taking into account any limitations or restrictions on the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock, if any).

In such case, appropriate adjustment shall be made with respect to Global BioMedical's rights under the Certificate of Designation to ensure that the provisions of the Certificate of Designation relating to the Perpetual Convertible DSS Preferred Stock shall be applicable, as nearly as possible, to any stock, securities or assets acquirable by Global BioMedical upon conversion of the Perpetual Convertible DSS Preferred Stock into common stock in the stock capital of DSS (including, in the case of any consolidation, merger, sale or other similar transaction in which the successor Person is not DSS, an immediate adjustment to the Conversion Price to the value per common stock in the stock capital of DSS reflected by the terms of such consolidation, merger, sale or other similar transaction and a corresponding immediate adjustment to the number of common stock in the stock capital of DSS to be allotted and issued pursuant to the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock without taking into account any limitations or restrictions on the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock, if the value so reflected is less than the Conversion Price immediately prior to such consolidation, merger, sale or other similar transaction).

The provisions of this sub-paragraph (b) shall similarly apply to successive reorganisations, reclassifications, consolidations, mergers, sales or other similar transactions.

DSS shall not effect any such reorganisation, reclassification, consolidation, merger, sale or other similar transaction unless, prior to the consummation thereof, the successor Person (if not DSS) resulting from such reorganisation, reclassification, consolidation, merger, sale or other similar transaction shall assume, by written instrument substantially similar in form and substance to the Certificate of Designation, the obligation to deliver to Global BioMedical such stock, securities or assets which Global BioMedical shall be entitled to receive upon conversion of the Perpetual Convertible DSS Preferred Stock into common stock in the stock capital of DSS in accordance with the provisions of this sub-paragraph (b).

Notwithstanding anything to the contrary contained in the Certificate of Designation, with respect to any corporate event or other transaction contemplated by this sub-paragraph (b), Global BioMedical shall have the right to elect, prior to the consummation of such event or transaction, that DSS exercises its right of redemption as disclosed in **Section 2.8.1** (f) of this Circular (if applicable to such event or transaction) instead of giving effect to the provisions contained in this sub-paragraph (b).

# (c) Other Events

If any event of the type contemplated by the provisions of the Certificate of Designation but not expressly provided for in the provisions of the Certificate of Designation (including the granting of stock appreciation rights, phantom stock rights or other rights with equity features) occurs, the board of directors of DSS shall make an appropriate adjustment to the Conversion Price and the number of common stock in the stock capital of DSS to be allotted and issued pursuant to the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock so as to protect Global BioMedical in a manner consistent with the provisions of the Certificate of Designation, provided that no adjustment shall increase the Conversion Price or decrease the number of common stock in the stock capital of DSS to be allotted and issued pursuant to the exercise of the right of conversion of the Perpetual Convertible DSS Preferred Stock unless provided otherwise pursuant to the provisions of the Certificate of Designation.

- 2.8.3 The Conversion Price was arrived at arm's length basis, after taking into account, inter alia, the following:
  - (a) the closing price of the common stock in the stock capital of DSS on the New York Stock Exchange of US\$0.216³ on 2 March 2020, being the last full market day on which trades were done preceding the date the Term Sheet was proposed to the chief executive officer of DSS; and
  - (b) the prevailing economic conditions."

#### Notes:

(3) On 16 March 2020, the Company announced, *inter alia*, that the conversion price for the Perpetual Convertible DSS Preferred Stock was US\$0.216. Further to the announcement made by the Company on 16 March 2020, DSS completed a stock consolidation of every 30 existing common stock in the stock capital of DSS into one (1) consolidated common stock in the stock capital of DSS (the "DSS Stock Consolidation"). Following the DSS Stock Consolidation, the conversion price for the Perpetual Convertible DSS Preferred Stock was adjusted accordingly to US\$6.48.

# 5 EVALUATION OF THE PROPOSED US\$50 MILLION SHARE SWAP

# 5.1 Rationale for the Proposed US\$50 million Share Swap

We have considered the rationale for the Proposed US\$50 million Share Swap as set out in Section 2.4 of the Circular and which is reproduced in italics below for your ease of reference:-

"The Board believes that the Proposed US\$50 million Share Swap will form a strategic relationship between the Company and DSS. The Proposed US\$50 million Share Swap also allows the Company to realise the potential of its subsidiary, Impact BioMedical, and reinforce its position as a global corporation. In addition, the Board believes that there are various synergies between the DSS' security solutions and Impact BioMedical's expertise and know-how in the biomedical industry.

# (a) Synergies for Impact BioMedical

The Board believes that the anti-counterfeit, authentication and brand protection solutions offered by DSS will assist in protecting Impact BioMedical's product packaging from counterfeiting and fraud, allow consumers to authenticate Impact BioMedical's products, and in doing so, safeguard the integrity and value of Impact BioMedical's brand.

In addition, the management is of the view that as a subsidiary of a company listed on the New York Stock Exchange, Impact BioMedical will be able to attract a wider pool of institutional investors based in the United States of America and collaborate with a wider pool of scientific partners in the biomedical industry based in the United States of America. The management is also of the view that DSS, being listed on the New York Stock Exchange, is able to raise more funds to commercialise the assets held by Impact BioMedical given that retail investors based in the United States of America will have a better understanding of Impact BioMedical's management, Impact BioMedical's collaborations with its scientific partners, the testing of Impact BioMedical's assets and accreditations of assets held by Impact BioMedical, all of which are based in the United States of America.

# (b) Synergies for DSS

DSS is constantly adapting to the dynamic and ever-changing landscape to stay ahead of its competition. DSS recognises that the biomedical security sector is emerging as a new sector in the security space. Acquiring Impact BioMedical as a subsidiary through the Proposed US\$50 million Share Swap will allow DSS to collaborate with Impact BioMedical to develop biomedical security solutions for Impact BioMedical's current products and future products in the pipeline. In addition, DSS hopes to expand its anti-counterfeit, authentication and brand protection solutions to cover the biomedical

security sector by tapping into Impact BioMedical's expertise and know-how in the biomedical industry.

For the aforementioned reasons, the Board is confident that the Proposed US\$50 million Share Swap will bring value to Shareholders and that the Proposed US\$50 million Share Swap is in the best interests of the Company and its Shareholders."

# 5.2 Assessment of the reasonableness of the Consideration

We note that the Consideration of US\$50 million was arrived at arm's length and on a willing-buyer-willing seller basis, after taking into account, *inter alia*, the factors set out in Section 2.5.3 of the Circular. In assessing the reasonableness of the Consideration, we have considered the following:-

- (i) the financial performance and financial condition of Impact BioMedical;
- (ii) Consideration versus the market capitalisation of the Company; and
- (iii) independent valuations of the intangible assets of Impact BioMedical

# 5.2.1 Financial performance and financial condition of Impact BioMedical

As at the Latest Practicable Date, the total amount of funds invested by the Company into Impact BioMedical amounts to approximately US\$2,979,214, which have been mainly utilised for R&D expenditures, legal fees and consulting fees in respect of its Biomedical business.

For the latest financial year ended 31 December 2019, Impact BioMedical has yet to record any revenue, as it is still working on the R&D and preparations for the commercialisation of the products under development and incurred net loss attributable to common stockholders of approximately US\$0.45 million. As at 31 December 2019 and adjusting for the Impact BioMedical Subscription, the NAV and NTA of Impact BioMedical (excluding non-controlling interest) is approximately US\$86,383.

# 5.2.2 Consideration versus the market capitalisation of the Company

The Group's operations comprise Property Development, Info-Tech Related, Investment and Biomedical Businesses. Based on the audited financial statements for the financial year ended 31 December 2019, we note that the Group's Biomedical Business, which includes Impact BioMedical and its subsidiaries, currently contributes to only approximately 5.9% of the Group's total revenue for FY2019, while assets attributable to the Biomedical Business accounts for only approximately 2.9% of the total assets of the Group recognized on the balance sheet as at 31 December 2019.

In this regard, we set out below a comparison of the Consideration of US\$50 million (which is equivalent to approximately S\$70.9 million based on the exchange rate on 27 April 2020 (the "Reference Date"), being the date of on which the Share Exchange Agreement was executed, of US\$1.00:S\$1.4187) versus the Company's market capitalisation based on: (i) the 1-month volume weighted average price ("VWAP") of the Company's shares for the 1-month period prior to the Reference Date of S\$0.0437; (ii) the closing price of the Company's shares at the Latest Practicable Date of S\$0.06; and (iii) the current total issued shares of the Company of 1,177,934,284:-

	No. of Outstanding Shares	S\$	Premium/(Discount) of Consideration to Market Capitalisation (%)
Market Capitalisation as implied by 1-month VWAP of S\$0.0437	1,177,934,284	51,432,044	37.9%

Market Capitalisation	1,187,934,284	71,276,057	(0.5)%
implied by Closing			
Price as at LPD of			
S\$0.06			

As noted from the table above, the Consideration represents a premium/(discount) of 37.9% and (0.5)% respectively to the entire market capitalisation of the Company based on the 1-month VWAP market capitalisation as of the Reference Date and as at the Latest Practicable Date respectively.

### 5.2.4 Independent valuations of the intangible assets of Impact BioMedical

Based on the Valuation Reports, we noted that valuations were conducted on the four (4) distinct intangible assets mainly co-owned by Impact BioMedical and its scientific research partner GRDG Sciences, LLC (the "Suite"), namely LineBacker, Laetose, 3F and Equivir, using a variety of industry accepted methodologies, and the sum of the assessed valuation of the intangible assets held by Impact BioMedical (adjusted to take into account its effective ownership interest in the respective assets) as reported in the First Valuation Report and the Calculations of Value Report was approximately US\$382 million and US\$933 million respectively. Details on the valuations on the intangible assets held by Impact BioMedical are set out in Sections 2.3.3 and 2.3.4 of the Circular and a copy of the First Valuation Report is set out in Appendix A to the Circular and Shareholders should read the information set out therein carefully.

Whilst the results of the Valuation Reports highlights the potential values that can be unlocked through the successful development and commercialisation of the four intangible assets mentioned above, the following should be noted:-

- (i) valuation of intangible assets is an imprecise science and the Valuation Reports were prepared based on, and is dependent on the validity of, the numerous assumptions as adopted by the respective valuers to arrive at their respective assessment of the values of the intangible assets of Impact BioMedical;
- (ii) the Calculations of Value Report was a calculation report (which differs from a valuation engagement in that a valuation engagement requires more procedures and a greater level of analysis and reporting) and had relied upon calculations, data and assumptions from the previous valuations performed by Destum Partners and on other third party market data. We noted that the vast difference in the assessed values in the two reports is mainly because the Calculations of Value Report took into consideration numerous additional disease applications of the Suite as compared to those covered in the First Valuation Report i.e. based on 45 potential applications in the Calculations of Value Report versus 9 potential applications in the First Valuation Report;
- (iii) R&D projects in biomedical products entail a high degree of uncertainty and there is always a likelihood that a product does not make it through all the development phases or that a product when launched may not be commercially successful. For example, as set out in the First Valuation Report, it is estimated that there is only a 8.4% probability of achieving FDA approval based on the current stage of development of LineBackers as an oral treatment for Parkinson's disease; and
- (iv) the Company is of the view that Impact BioMedical has great potential but at the same time require a considerable amount of investment and funding to commercialise the intellectual properties and pipeline products held under Impact BioMedical. For example, in the case of the use of LineBackers as an oral treatment for Parkinson's disease (with a valuation attributable to Impact BioMedical as assessed by Destum Partners of US\$154.6 million), Destum Partners anticipates that a total spend of US\$42 million over a 6-year period will be required before drug approval can be obtained and the product can be made available for roll-out in the US market in the year 2027.

# 5.3 Structure of the Proposed Disposal and Issue Price of DSS Shares

The proposed disposal of Impact BioMedical is structured in the form of the Proposed US\$50 million Share Swap comprising the issuance of the following to Global BioMedical:-

- (a) 483,334 New DSS Common Stock with a stated value of US\$3,132,000 or US\$6.48 per New DSS Common Stock ("DSS Share Issue Price") and a par value of US\$0.02 for each New DSS Common Stock; and
- (b) 46,868 Perpetual Convertible DSS Preferred Stock (which has no maturity date) with a stated value of US\$46,868,000 or US\$1,000 per Perpetual Convertible DSS Preferred Stock and a par value of US\$0.02 for each Perpetual Convertible DSS Preferred Stock. The Perpetual Convertible DSS Preferred Stock shall be convertible into common stock in the stock capital of DSS ("DSS Shares") at a conversion price of US\$6.48 ("DSS Share Conversion Price"), provided always that the right of conversion shall not be exercised by Global BioMedical to the extent that Global BioMedical holds more than 19.99% of the total issued and paid-up stock capital of DSS on an enlarged basis after such conversion (the "Prescribed Conversion Limit").

It is noted that the 483,334 New DSS Common Stock will not be subject to any moratorium but the bulk of the Consideration (approximately 93.7%) will be satisfied through the issuance of the Perpetual Convertible DSS Preferred Stock which: (i) shall have no voting rights (except as required by applicable laws and regulations; (ii) will not be entitled to any dividends; (iii) may be redeemable by DSS at any time and from time to time, on or after the date of issuance, all or a portion of the then outstanding Shares of the Perpetual Convertible DSS Preferred Stock, pro rata among all holders of the Perpetual Convertible DSS Preferred Stock, for US\$1,000 per Perpetual Convertible DSS Preferred Stock whilst Global BioMedical shall have the right to exercise its right of conversion instead of giving effect to the redemption by DSS but has to do so before the Conversion Election Date; (iv) the conversion thereof is subject to the Prescribed Conversion Limit; and (v) save that DSS shall have the right to redemption as mentioned in (iii), the Perpetual Convertible DSS Preferred Stock are perpetual securities of DSS with no maturity date.

Notwithstanding that Global BioMedical cannot hold more than 19.99% of the total issued and paid-up share capital of DSS at any one time on an enlarged basis after such conversion due to the Prescribed Conversion Limit, we note that the Company will be able to continue to capture the growth of Impact BioMedical in the future when there is commercialisation of intellectual properties held by Impact BioMedical which should result in price appreciation in DSS Shares, by exercising Global BioMedical's right of conversion and selling such converted DSS shares for a potential return on investment.

In this regard, we also note that in the absence of the Prescribed Conversion Limit and if Global BioMedical was allowed to exercise its right of conversion and converts all the Perpetual Convertible DSS Preferred Stock into DSS shares on the completion date, Global BioMedical will hold, in aggregate, DSS shares representing approximately 78.8% of the total issued and paid-up share capital of DSS on an enlarged basis. For illustrative purposes, based on the 1-month VWAP of DSS Shares for the 1-month period prior to the Reference Date of US\$8.562 (adjusted for the 1-for-30 reverse stock split), the value of such DSS Shares will amount to approximately US\$66.1 million, compared with the Consideration of US\$50 million.

In addition, we note that the DSS Share Issue Price and DSS Share Conversion Price of US\$6.48 is at a discount of 24.3%, 19.0% and 19.3% respectively to the VWAP of DSS Shares for the 1-month, 3-months and 6-months period prior to the Reference Date respectively.

# 5.4 Financial effects of the Proposed US\$50 million Share Swap

Whilst there is no anticipated cashflow impact arising from the Proposed US\$50 million Share Swap, save for the estimated costs and expenses incurred or to be incurred in connection with the Proposed US\$50 million Share Swap of approximately S\$100,000 which will be funded through the Group's internal resources, we note that the Proposed US\$50 million Share Swap

will result in a gain on disposal after completion of the disposal of the Sale Shares to DSS BioHealth being recognised by the Company which amounts to approximately S\$72.46 million (equivalent to approximately US\$51.68 million, based on an average exchange rate of US\$1: S\$1.4022).

The proforma financial effects of the Proposed US\$50 million Share Swap prepared based on the audited consolidated financial statements of the Group for FY2019 is set out in Section 2.11 of the Circular. In this regard, we note that the Proposed US\$50 million Share Swap will result in an increase in the proforma NTA per Share from S\$0.0214 to S\$0.0837 and an improvement in the EPS from a loss per Share of S\$(0.0124) to an earnings per Share of S\$0.0533.

#### 5.5 Other relevant considerations

#### 5.5.1 Business and risk factors relating to DSS

Upon the completion of the Proposed US\$50 million Share Swap, the Company will become a substantial shareholder of DSS and accordingly the business developments, prospects and risks associated thereof of DSS will be relevant to the Company. Shareholders should familiar themselves with the business of DSS and the corresponding risks attached and may wish to refer to the announcements of DSS since it is a listed company.

# 5.5.2 Negative free cash flows

Based on the Form 10-K filing of DSS dated 14 May 2020 which was filed with the Securities & Exchange Commission, it is noted that while DSS has approximately US\$3.8 million in cash and a positive working capital position of approximately US\$5.5 million as of 31 March 2020, it had incurred negative cash flows from operating and investing activities over the past two years and that based on its current operating levels and capital usage, the cash balance of US\$3.8 million would allow DSS to fund its nine business lines current and planned operations through May 2021.

# 6. OUR OPINION

In arriving at our opinion, we have taken into account the following key considerations which we consider to be pertinent to our assessment of the Proposed US\$50 million Share Swap:

- (a) the rationale for the Proposed US\$50 million Share Swap, details of which are set out in Section 5.1 of this IFA Letter;
- (b) assessment of the reasonableness of the Consideration, details of which are set out in Section 5.2 of this IFA Letter;
- structure of the proposed disposal of Impact BioMedical, details of which are set out in Section 5.3 of this IFA Letter. In this regard, we noted that through the share swap, the Company will be able to continue to capture the growth of Impact BioMedical in the future when there is commercialisation of intellectual properties held by Impact BioMedical through price appreciation in DSS Shares, although it should be noted that the conversion of the Perpetual Convertible DSS Preferred Stock at any time will be subject to the Prescribed Conversion Limit;
- (d) DSS Share Issue Price and DSS Share Conversion Price of US\$6.48 is at a discount of 24.3%, 19.0% and 19.3% respectively to the VWAP of DSS Shares for the 1-month, 3-months and 6-months period prior to the Reference Date respectively; and
- (e) the financial effects of the Proposed US\$50 million Share Swap, details of which are set out in Section 5.4 of this IFA Letter, wherein it is noted that the proposed transaction is accretive to both the NTA and EPS of the Group on a proforma basis.

Having considered the foregoing considerations and based on information available to us as at the Latest Practicable Date, we are of the opinion that the Proposed US\$50 million Share Swap is on normal commercial terms and is not prejudicial to the interests of the Company and its minority Shareholders.

This letter is prepared pursuant to Rule 921(4)(a) of the Catalist Rules and is addressed to the Independent Directors for their use and benefit, in connection with and for the purposes of their consideration of the Proposed US\$50 million Share Swap. The recommendations made by the Independent Directors in respect of the Proposed US\$50 million Share Swap shall remain their responsibility.

While a copy of this letter may be reproduced in the Circular, no person may reproduce, disseminate or quote this IFA Letter (or any part thereof) for any purpose (other than the matters in relation to the Proposed US\$50 million Share Swap and the forthcoming EGM) at any time and in any manner without our prior written consent in each specific case. Our opinion is governed by, and construed in accordance with, the laws of Singapore, and is strictly limited to the matters stated herein and does not apply by implication to any other matter.

Yours faithfully

For and on behalf of W Capital Markets Pte Ltd

Foo Say Nam

Partner & Head of Advisory

Tsai Xinyi
Vice President
Corporate Finance

# APPENDIX C ALTERNATIVE ARRANGEMENTS

Shareholders may electronically access the EGM proceedings and observe and/or listen to the live audio-visual webcast or live audio-only stream via their mobile phones, tablets or computers, submit comments, queries and/or questions to the Chairman of the Meeting in advance of the EGM and submit Proxy Forms to appoint the Chairman of the Meeting to attend, speak and vote on his/her/its behalf at the EGM.

To do so, Shareholders will need to complete the relevant steps below.

Steps	Details					
Pre-registration for the live audio-visual webcast or live audio-only stream	Shareholders must pre-register at the URL <a href="https://forms.gle/WwdYAanptjmua7Gu5">https://forms.gle/WwdYAanptjmua7Gu5</a> from 4 June 2020 until 6.00 p.m. on Thursday, 18 June 2020 to enable the Company's Share Registrar, Boardroom Corporate & Advisory Services Pte. Ltd., to verify their status as Shareholders of the Company.					
	Following the verification, authenticated Shareholders will receive an email by 12.00 p.m. on Thursday, 25 June 2020 which will contain the user ID and password details as well as the URL to access the live audio-visual webcast or the toll-free telephone number to access the live audio-only stream (the "Confirmation Email").					
	Shareholders, who have pre-registered for the live audio-visual webcast or live audio-only stream but who have not received the Confirmation Email by 12.00 p.m. on Thursday, 25 June 2020, should contact the Company at <a href="mailto:sedegm2020.2@sed.com.sg">sedegm2020.2@sed.com.sg</a> .					
Submission of comments, queries and/or questions in advance of the EGM	Shareholders will not be able to comment, raise queries and/or ask questions at the EGM during the live audio-visual webcast or live audio-only stream. It is therefore important for Shareholders to submit comments, queries and/or questions to the Chairman of the Meeting in advance of the EGM.					
	Submission of comments, queries and/or questions. Shareholders may submit comments, queries and/or questions related to the resolutions in the Notice of EGM to the Chairman of the Meeting in advance of the EGM in the following manner:					
	(a) By post – Shareholders may submit their comments, queries and/or questions by post to the Company's Share Registrar, Boardroom Corporate & Advisory Services Pte. Ltd., at 50 Raffles Place #32-01 Singapore Land Tower Singapore 048623. Comments, queries and/or questions submitted by Shareholders by post must be accompanied by the Shareholders' full name, address and the manner in which the Shareholder holds Shares in the Company.					
	(b) By electronic means — Shareholders, who have pre-registered registered for the live audio-visual webcast or live audio-only stream, may submit their comments, queries and/or questions by electronic means at the URL <a href="https://forms.gle/WwdYAanptjmua7Gu5">https://forms.gle/WwdYAanptjmua7Gu5</a> .					
	<b>Deadline to submit comments, queries and/or questions.</b> Shareholders must submit all comments, queries and/or questions by 6.00 p.m. on Thursday, 18 June 2020.					

# APPENDIX C ALTERNATIVE ARRANGEMENTS

Steps	Details		
	Addressing comments, queries and/or questions. The Company will endeavour to address all substantial and relevant comments, queries and/or questions received from Shareholders before the EGM. The Company will publish its responses to comments, queries and/or questions on the Company's website at the URL <a href="http://sed.com.sg/responses-to-comments-queries-andor-questions-2">http://sed.com.sg/responses-to-comments-queries-andor-questions-2</a> and on SGXNET at the URL <a href="https://www.sgx.com/securities/company-announcements">https://www.sgx.com/securities/company-announcements</a> on Monday, 22 June 2020.		
	Minutes of EGM. The Company will publish the minutes of EGM on the Company's website at the URL <a href="http://sed.com.sg/minutes-of-egm-2">http://sed.com.sg/minutes-of-egm-2</a> and on SGXNET at the URL <a href="https://www.sgx.com/securities/company-announcements">https://www.sgx.com/securities/company-announcements</a> within one (1) month after the EGM. The minutes of EGM will include responses from the Board and the management to substantial and relevant comments, queries and/or questions received from Shareholders addressed at the EGM during the live audio-visual webcast or live audio-only stream.		
Submission of Proxy Forms to appoint the Chairman of the Meeting to attend, speak and vote at the	Appointment of Chairman of the Meeting as proxy. A Shareholder (whether individual or corporate) must appoint the Chairman of the Meeting as his/her/its proxy to attend, speak and vote on his/her/its behalf at the EGM in accordance with the instructions on the Proxy Form if such Shareholder wishes to exercise his/her/its voting rights at the EGM.		
EGM	Specific instructions as to voting must be given. Where a Shareholder (whether individual or corporate) appoints the Chairman of the Meeting as his/her/its proxy, he/she/it must give specific instructions as to voting, or abstentions from voting, in respect of a resolution in the Proxy Form, failing which the appointment of the Chairman of the Meeting as proxy for that resolution will be treated as invalid.		
	<b>Submission of Proxy Forms.</b> The Proxy Form must be submitted to the Company in the following manner:		
	(a) if submitted by post, be lodged with the Company's Share Registrar, Boardroom Corporate & Advisory Services Pte. Ltd., at 50 Raffles Place #32-01 Singapore Land Tower Singapore 048623; or		
	(b) if submitted by way of electronic means, be submitted via email to the Company at <a href="mailto:seed.com.sg">seed.com.sg</a> ,		
	in either case, by 11.30 a.m. on Tuesday, 23 June 2020.		
	A Shareholder who wishes to submit the Proxy Form must first download, complete and sign the Proxy Form, before submitting it by post to the address provided above, or by scanning and submitting it by way of electronic means via email to the email address provided above.		
	In view of the current COVID-19 restriction orders and the related safe distancing measures in Singapore which may make it difficult for Shareholders to submit the completed Proxy Forms by post, Shareholders are strongly encouraged to submit the completed Proxy Forms by way of electronic means via email.		

# NOTICE OF EXTRAORDINARY GENERAL MEETING

# Singapore eDevelopment Limited

(Incorporated in the Republic of Singapore) (Company Registration Number 200916763W)

**NOTICE IS HEREBY GIVEN** that an Extraordinary General Meeting (the "**EGM**") of **Singapore eDevelopment Limited** (the "**Company**") will be held by way of electronic means on 26 June 2020 at 11.30 a.m. (Singapore Time) or as soon as practicable immediately following the conclusion or adjournment of the Annual General Meeting of the Company to be held on the same day at 10.30 a.m. (Singapore Time) for the purpose of considering and, if thought fit, passing with or without any modifications, the following ordinary resolution:

All capitalised terms used in this notice of EGM which are not defined herein shall have the meanings ascribed to them in the circular to shareholders of the Company dated 4 June 2020 (the "Circular") in relation to the Proposed US\$50 million Share Swap.

# Ordinary Resolution: The Proposed US\$50 million Share Swap

That:

- (i) the disposal of 13,897,069 ordinary shares in the share capital of Impact BioMedical, Inc. ("Impact BioMedical") held by Global BioMedical Pte. Ltd. ("Global BioMedical"), representing the entire issued and paid-up share capital of Impact BioMedical; (ii) the allotment and issue of 483,334 new common stock in the stock capital of Document Security Systems, Inc. ("DSS"), representing approximately 18.87% of the total issued and paid-up stock capital of DSS on an enlarged basis comprising 2,562,021 common stock as at the Latest Practicable Date, to Global BioMedical; and (iii) the allotment and issue of 46,868 perpetual convertible preferred stock in the stock capital of DSS, which are convertible into common stock in the stock capital of DSS, to Global BioMedical (collectively, the "Proposed US\$50 million Share Swap") as an "interested person transaction" under Chapter 9 of the Catalist Rules, as a "major transaction" under Chapter 10 of the Catalist Rules and as set out in Section 2 of this Circular be and is hereby approved; and
- (b) the Directors and/or any of them be and are hereby authorised and empowered to approve, complete and do all such acts and things (including approving, modifying, ratifying, signing, sealing, executing and delivering all such agreements, contracts, documents, notices, deeds or instruments as may be required) as they and/or he may consider expedient, desirable or necessary or in the interests of the Company to give effect to the matters considered in this Ordinary Resolution.

By Order of the Board of Directors of Singapore eDevelopment Limited

Chan Heng Fai Executive Chairman, Executive Director and Chief Executive Officer

4 June 2020 Singapore

# NOTICE OF EXTRAORDINARY GENERAL MEETING

#### Notes:

- 1. Pursuant to the COVID-19 (Temporary Measures) (Alternative Arrangements for Meetings for Companies, Variable Capital Companies, Business Trusts, Unit Trusts and Debenture Holders) Order 2020, the EGM will be held by way of electronic means on 26 June 2020 at 11.30 a.m. (Singapore Time) or as soon as practicable immediately following the conclusion or adjournment of the Annual General Meeting of the Company to be held on the same day at 10.30 a.m. (Singapore Time) for the purpose of considering and if thought fit, passing, with or without any modification, the Ordinary Resolution relating to the Proposed US\$50 million Share Swap.
- Printed copies of this Notice of EGM, the Circular and the Proxy Form will not be sent to Shareholders. Instead, this Notice of EGM, the Circular and the Proxy Form may be accessed at the Company's website at the URL <a href="http://sed.com.sg/notice-of-egm-the-circular-and-the-proxy-form-2">http://sed.com.sg/notice-of-egm-the-circular-and-the-proxy-form-2</a> by clicking on the hyperlinks titled "EGM June 2020 Notice", "EGM June 2020 Circular" and "EGM June 2020 Proxy Form" respectively. This Notice of EGM, the Circular and the Proxy Form are also available on SGXNET at the URL <a href="https://www.sgx.com/securities/company-announcements">https://www.sgx.com/securities/company-announcements</a>.
- 3. Alternative arrangements relating to attendance at the EGM via electronic means (including arrangements by which the EGM proceedings may be electronically accessed via live audio-visual webcast or live audio-only stream), submission of comments, queries and/or questions to the Chairman of the Meeting in advance of the EGM, addressing of substantial and relevant comments, queries and/or questions before the EGM and voting by appointing the Chairman of the Meeting as proxy at the EGM, are set out in Section 8 of the Circular.
- 4. Due to the current COVID-19 restriction orders in Singapore, Shareholders will not be able to attend the EGM in person. A Shareholder (whether individual or corporate) must appoint the Chairman of the Meeting as his/her/its proxy to attend, speak and vote on his/her/its behalf at the EGM in accordance with the instructions on the Proxy Form if such Shareholder wishes to exercise his/her/its voting rights at the EGM. The Proxy Form may be accessed at the Company's website at the URL <a href="http://sed.com.sg/notice-of-egm-the-circular-and-the-proxy-form-2">http://sed.com.sg/notice-of-egm-the-circular-and-the-proxy-form-2</a> by clicking on the hyperlink titled "EGM June 2020 Proxy Form" and is also available on SGXNET at the URL <a href="https://www.sgx.com/securities/company-announcements">https://www.sgx.com/securities/company-announcements</a>. Where a Shareholder (whether individual or corporate) appoints the Chairman of the Meeting as his/her/its proxy, he/she/it must give specific instructions as to voting, or abstentions from voting, in respect of a resolution in the Proxy Form, failing which the appointment of the Chairman of the Meeting as proxy for that resolution will be treated as invalid.
- 5. The Chairman of the Meeting, acting as proxy, need not be a Shareholder of the Company.
- 6. The Proxy Form must be submitted to the Company in the following manner:
  - (a) if submitted by post, be lodged with the Company's Share Registrar, Boardroom Corporate & Advisory Services Pte. Ltd., at 50 Raffles Place #32-01 Singapore Land Tower Singapore 048623; or
  - (b) if submitted by way of electronic means, be submitted via email to the Company at <a href="mailto:sedegm2020.2@sed.com.sg">sed.com.sg</a>,

in either case, by 11.30 a.m. on Tuesday, 23 June 2020. A Shareholder who wishes to submit the Proxy Form must first download, complete and sign the Proxy Form, before submitting it by post to the address provided above, or by scanning and submitting it by way of electronic means via email to the email address provided above. In view of the current COVID-19 restriction orders and the related safe distancing measures in Singapore which may make it difficult for Shareholders to submit the completed Proxy Forms by post, Shareholders are strongly encouraged to submit the completed Proxy Forms by way of electronic means via email.

# Personal Data Privacy:

By submitting the Proxy Form appointing the Chairman of the Meeting as proxy to attend, speak and vote at the EGM and/or any adjournment thereof, a Shareholder consents to the collection, use and disclosure of the Shareholder's personal data by the Company (or its agents or service providers) for the purpose of the processing, administration and analysis by the Company (or its agents or service providers) of the appointment of the Chairman of the Meeting as proxy for the EGM and/or any adjournment thereof, and the preparation and compilation of the attendance lists, minutes and other documents relating to the EGM and/or any adjournment thereof), and in order for the Company (or its agents or service providers) to comply with any applicable laws, listing rules, take-over rules, regulations and/or guidelines.

# **PROXY FORM**

# Singapore eDevelopment Limited (Incorporated in the Republic of Singapore) (Company Registration Number 200916763W)

I/We*	(Nam	e)	(NRIC / Passport / Company Registration Number*)				
of				(Address)			
Meeting as my/ electronic mear the conclusion	our* proxy to attend, sp ns on 26 June 2020 at 1	peak and vote for me I1.30 a.m. (Singapor Annual General Me	d (the "Company"), hereby a /us* on my/our* behalf at the e Time) or as soon as practiceting of the Company to be eof.	e EGM to be held by way of cable immediately following			
I/We* direct the Chairman of the Meeting to vote for or against the Ordinary Resolution to be proposed at the EGM as indicated hereunder. If no specific direction as to voting, or abstentions from voting, is given in respect of the Ordinary Resolution, the appointment of the Chairman of the Meeting as proxy for the Ordinary Resolution shall be treated as invalid. The Ordinary Resolution will be put to vote at the EGM by way of poll.							
Ordinary Resolution		Number of Votes For#	Number of Votes Against#				
1. To approv	ve the Proposed US\$5	0 million Share					
* Delete as appropri # If you wish to exe number of votes as	rcise all your votes "For" or "	Against", please indicate s	so with a $\left [  \right ]$ within the box provided	I. Alternatively, please indicate the			
Dated this	day of	2020.	Total number of Shares (a) CDP Register (b) Register of Members	s in: Number of Shares			
Signature or Co	ommon Soal of Sharah	oldor					

IMPORTANT: PLEASE READ NOTES OVERLEAF BEFORE COMPLETING THIS PROXY FORM



# **PROXY FORM**

#### Notes:

- 1. Pursuant to the COVID-19 (Temporary Measures) (Alternative Arrangements for Meetings for Companies, Variable Capital Companies, Business Trusts, Unit Trusts and Debenture Holders) Order 2020, the EGM will be held by way of electronic means on 26 June 2020 at 11.30 a.m. (Singapore Time) or as soon as practicable immediately following the conclusion or adjournment of the Annual General Meeting of the Company to be held on the same day at 10.30 a.m. (Singapore Time) for the purpose of considering and if thought fit, passing, with or without any modification, the Ordinary Resolution relating to the Proposed US\$50 million Share Swap.
- 2. Printed copies of the Notice of EGM, the Circular and this Proxy Form will not be sent to Shareholders. Instead, the Notice of EGM, the Circular and this Proxy Form may be accessed at the Company's website at the URL <a href="http://sed.com.sg/notice-of-egm-the-circular-and-the-proxy-form-2">http://sed.com.sg/notice-of-egm-the-circular-and-the-proxy-form-2</a> by clicking on the hyperlinks titled "EGM June 2020 Notice", "EGM June 2020 Circular" and "EGM June 2020 Proxy Form" respectively. The Notice of EGM, the Circular and this Proxy Form are also available on SGXNET at the URL <a href="https://www.sgx.com/securities/company-announcements">https://www.sgx.com/securities/company-announcements</a>.
- 3. Alternative arrangements relating to attendance at the EGM via electronic means (including arrangements by which the EGM proceedings may be electronically accessed via live audio-visual webcast or live audio-only stream), submission of comments, queries and/or questions to the Chairman of the Meeting in advance of the EGM, addressing of substantial and relevant comments, queries and/or questions before the EGM and voting by appointing the Chairman of the Meeting as proxy at the EGM, are set out in Section 8 of the Circular.
- 4. Due to the current COVID-19 restriction orders in Singapore, Shareholders will not be able to attend the EGM in person. A Shareholder (whether individual or corporate) must appoint the Chairman of the Meeting as his/her/its proxy to attend, speak and vote on his/her/its behalf at the EGM in accordance with the instructions on this Proxy Form if such Shareholder wishes to exercise his/her/its voting rights at the EGM. This Proxy Form may be accessed at the Company's website at the URL <a href="http://sed.com.sg/notice-of-egm-the-circular-and-the-proxy-form-2">http://sed.com.sg/notice-of-egm-the-circular-and-the-proxy-form-2</a> by clicking on the hyperlink titled "EGM June 2020 Proxy Form" and is also available on SGXNET at the URL <a href="https://www.sgx.com/securities/company-announcements">https://www.sgx.com/securities/company-announcements</a>. Where a Shareholder (whether individual or corporate) appoints the Chairman of the Meeting as his/her/its proxy, he/she/it must give specific instructions as to voting, or abstentions from voting, in respect of a resolution in this Proxy Form, failing which the appointment of the Chairman of the Meeting as proxy for that resolution will be treated as invalid.
- 5. Please insert the total number of Shares held by you. If you have Shares entered against your name in the Depository Register (as defined in Section 81SF of the SFA), you should insert that number of Shares. If you have Shares registered in your name in the Register of Members, you should insert that number of Shares. If you have Shares entered against your name in the Depository Register and Shares registered in your name in the Register of Members, you should insert the aggregate number of Shares entered against your name in the Depository Register and registered in your name in the Register of Members. If no number is inserted, this Proxy Form shall be deemed to relate to all the Shares held by you.
- 6. The Chairman of the Meeting, acting as proxy, need not be a Shareholder of the Company.
- 7. This Proxy Form must be submitted to the Company in the following manner:
  - (a) if submitted by post, be lodged with the Company's Share Registrar, Boardroom Corporate & Advisory Services Pte. Ltd., at 50 Raffles Place #32-01 Singapore Land Tower Singapore 048623; or
  - (b) if submitted by way of electronic means, be submitted via email to the Company at <a href="mailto:sedegm2020.2@sed.com.sg">sed.com.sg</a>,
  - in either case, by 11.30 a.m. on Tuesday, 23 June 2020. A Shareholder who wishes to submit this Proxy Form must first download, complete and sign this Proxy Form, before submitting it by post to the address provided above, or by scanning and submitting it by way of electronic means via email to the email address provided above. In view of the current COVID-19 restriction orders and the related safe distancing measures in Singapore which may make it difficult for Shareholders to submit the completed Proxy Forms by post, Shareholders are strongly encouraged to submit the completed Proxy Forms by way of electronic means via email.
- 8. Where this Proxy Form is executed by an individual, it must be executed under the hand of the individual or his/her attorney duly authorised. Where this Proxy Form is executed by a corporation, it must be executed either under its common seal or under the hand of any officer or attorney duly authorised.

# General:

The Company shall be entitled to reject a Proxy Form which is incomplete, improperly completed, illegible or where the true intentions of the appointor are not ascertainable from the instructions of the appointor specified on the Proxy Form. In addition, in the case of Shares entered in the Depository Register, the Company may reject a Proxy Form if the Shareholder, being the appointor, is not shown to have Shares entered against his name in the Depository Register as at 72 hours before the time fixed for holding the EGM, as certified by the CDP to the Company. A Depositor shall not be regarded as a Shareholder of the Company entitled to attend, speak and vote at the EGM unless his name appears on the Depository Register 72 hours before the time fixed for holding the EGM.

# Personal data privacy:

By submitting the Proxy Form appointing the Chairman of the Meeting as proxy to attend, speak and vote at the EGM and/or any adjournment thereof, a Shareholder consents to the collection, use and disclosure of the Shareholder's personal data by the Company (or its agents or service providers) for the purpose of the processing, administration and analysis by the Company (or its agents or service providers) of the appointment of the Chairman of the Meeting as proxy for the EGM and/or any adjournment thereof, and the preparation and compilation of the attendance lists, minutes and other documents relating to the EGM and/or any adjournment thereof), and in order for the Company (or its agents or service providers) to comply with any applicable laws, listing rules, take-over rules, regulations and/or guidelines.