

**SPEECH BY MR. YEOH KEAT CHUAN, MANAGING DIRECTOR, SINGAPORE
ECONOMIC DEVELOPMENT BOARD, AT THE GROUNDBREAKING CEREMONY
OF NOVARTIS' BIOPHARMACEUTICAL MANUFACTURING FACILITY ON 6 FEB
2013, 12P.M., AT TUAS BIOMEDICAL PARK**

His Excellency, Mr Thomas Kupfer, Swiss Ambassador to Singapore,

Mr Juan Andreas, Head Global Technical Operations,

Mr Pierre-Alain Ruffieux, (*pronounced as Pe-aire Alarng Rooffiew*) Head of
Pharmaceuticals Quality,

Mr Christopher Snook, Head Country Management and Country President
Singapore,

Distinguished Guests,

Ladies and Gentlemen,

Introduction

1. Good morning. It gives me great pleasure to join you today for the groundbreaking ceremony of Novartis' Biopharmaceutical Facility. Today's ceremony marks an important milestone in the Singapore-Novartis partnership.

2. This new facility is Novartis' first biopharmaceuticals manufacturing plant in Asia and the largest biologics investment in Singapore to date. Novartis' decision is a testament to the strong capabilities that Singapore has built up in our Biomedical Sciences manufacturing sector over the years. I was personally involved in working with the Novartis Biopharmaceuticals project team in the early days of the discussion and am glad to see a few familiar faces in the crowd (i.e. Pierre-Alain). Juan, Pierre-Alain, I am delighted that our early discussions have finally come to fruition.

Singapore's commitment to the development of the biomedical sciences manufacturing industry

3. Singapore's biomedical sciences industry has grown rapidly over the past 40 years. Today, we are home to more than 50 commercial scale manufacturing plants¹. Over the last ten years, our manufacturing output for the industry has increased by five-fold from S\$6 billion to close to S\$30 billion. Likewise, employment has grown significantly from 6,000 to 15,000 over the same period.

4. Today, Singapore is a leading global manufacturing site for active pharmaceutical ingredients (APIs) and solid dosage and is well placed to

¹ (E.g. Merck, Pfizer, Baxter)

ride on the growth of Asia. We have also diversified successfully into new modalities like biologics and cell therapy which hold tremendous potential for the future of medicine.

5. We have achieved considerable success within a short span of five years since our first biologics manufacturing investment in 2007. With Novartis' investment, Singapore will be home to eight biologics manufacturing facilities with about S\$2.4 Billion in total investments and employing more than 1,700 people

6. The global biologics market was estimated to exceed values of US\$117 billion by the end of 2012 and expected to account for nearly 15% of the global pharmaceutical market by 2017². Singapore has positioned itself as an attractive location for biologics manufacturing through the development of a strong talent pool, a strong track record in regulatory compliance and quality as well as access to reliable infrastructure and supporting services. Let me elaborate further on what we have done in building Singapore's talent and capabilities.

² Source: IMARC Group "Global Biopharmaceutical Market Report & Forecast (2012-2017)" Published Nov 2012
<http://www.1888pressrelease.com/biologics-to-account-for-13-5-of-the-global-pharmaceutical-pr-438093.html>

Singapore is well positioned to capture and support the growth of the biologics manufacturing sector

Talent Development

7. Biologics manufacturing is a knowledge intensive and high value added activity and complements the education profile of Singapore's local population. The strong local talent pool from our educational institutes and the Bioprocessing Technology Institute (BTI) under the A*STAR³ enables companies to ramp up their operations quickly.

8. As Singapore continues to build upon its success in biologics and capture more growth in this sector, we have embarked on plans for the future by rolling out the Development and Apprenticeship (DNA) programme to biopharmaceutical companies. The programme aims to build up a talent pool of more than 300 Singaporean manufacturing specialists. Since its inception, the DNA programme has provided much needed flexibility to companies' manpower demands and has received excellent responses from the local biomedical community. Novartis for example has

³ BTI provides the Bioprocess Internship Programme to train skilled talent in biologics and process development for biologics specific positions.

been an active participant of the DNA programme and we look forward to the continued success of the DNA with other biopharmaceutical companies.

Process Development Capabilities

9. Additionally, companies seeking to enhance process development and new product introduction capabilities in Asia can leverage Singapore's initiatives like our [Industrial Postgraduate Programme \(IPP\)](#). The programme is a joint effort between the Ministry of Education, EDB and local universities. This will help train a pool of specialized talent capable of developing innovative processes of manufacturing a drug more efficiently and sustainably. We believe that this will ensure Singapore's future as a competitive and sustainable manufacturing location.

10. Top pharmaceutical companies can also collaborate with the BTI which has developed strong capabilities in bio-process development, to strengthen linkages between the laboratory and manufacturing activities. I hope to see more strategic partnerships formed with the BTI and would like to encourage more companies to support the good work they are doing.

Singapore - a long term strategic partner to Novartis and an integrated

Home in Asia

11. Singapore's partnership with Novartis has blossomed over the years. The company's presence in Singapore now includes the Novartis Institute for Tropical Diseases, four manufacturing facilities producing pharmaceuticals and eye care products as well as a regional headquarters. With Novartis' strong focus on talent development and global recognition as an employer of choice, the company's extensive footprint here will provide exciting career opportunities for Singaporeans in the pharmaceutical industry.

12. Novartis is now one of the top three biomedical investors in Singapore with investments totaling more than S\$1 billion and employing more than 1,000 staff. We are heartened by the strong vote of confidence by Novartis and are hopeful that the integrated base of activities here will help the company to better navigate and continue growing in the Asian markets.

Conclusion

13. Novartis' new investment in this facility coupled with the rapid expansion of its presence in Singapore over a short time frame over the past 10 years is testament to the continued support for Singapore. The

new facility will also contribute positively to the rapid developments we have made in the local biologics sector.

14. I would like to thank Juan, Pierre-Alain, Christopher and their team for the trust and commitment you have placed in Singapore. I would also like to express heartfelt thanks to our colleagues from JTC, PUB and other participating government agencies for their significant contributions towards this project. I wish the management and staff of Novartis every success. Thank you.