



PlantForm Corporation

Annual General Meeting
September 2013



plantformcorp.com



Key events in F2013

Company

- PlantForm signs Mandate with Emirates NBD Bank, Dubai to seek \$35 million financing in Middle East and Europe
- PlantForm signs \$2 million equity financing agreement with Atlantic Assets Trust, UK
- PlantForm signs drug development agreement with PharmaPraxis, Brazil
- PlantForm secures renewed project financing of ~\$500,000 from IRAP-CHTD (Gates Foundation and Canada) to advance its HIV/AIDS project
- PlantForm signs agreement with DARPA, USA to conduct a \$1.8 million contract developing a nerve gas antidote
- PlantForm signs second technology license agreement with the University of Guelph



Key industry events in F2013

- European Medicines Agency (EMA) approved the first two biosimilar monoclonal antibodies in the EU, Celltrion Healthcare's Remsima and Hospira's Inflectra. Both drugs are biosimilar versions of Remicade® a drug indicated for inflammatory diseases including rheumatoid arthritis and Crohn's disease.
- The European Committee for Medicinal Products for Human Use recommended granting a marketing authorization for Apotex's biosimilar Neupogen® (Grastofil) used for treatment of neutropenia.
- Gilead Sciences, Inc. completed its acquisition of Canada-based antibody drug development company, YM BioSciences Inc. for \$510 million. Gilead's oncology pipeline has been strengthened by the addition of YM's CYT387 drug candidate which has completed phase I/II studies for a myelofibrosis indication.
- Mitsubishi Tanabe Pharma Corporation completed its acquisition of Medicago Inc., a Canadian plant-based drug development company, in a transaction valued at \$357 million.



PlantForm's Key Technology Platform

High Yield Production





PlantForm's Strong Diverse Pipeline

Pipeline Drugs	Potential Market Size	Market Entry
Biosimilar Herceptin®	\$ 7bn	2016
Biosimilar Avastin®	\$ 6bn	2017-019
Biosimilar Erbix®	\$ 4bn	
HIV antibodies	CHTD-IRAP	Ongoing revenue stream
Butyryl cholinesterase	DARPA	



Technical Advances

■ Platform

- Established a fully mammalian glycosylation system for plant produced drugs
- Established a novel very high level expression system, P19

■ Butyrylcholinesterase

- Novel glycosylated form of the drug developed
- Production process established

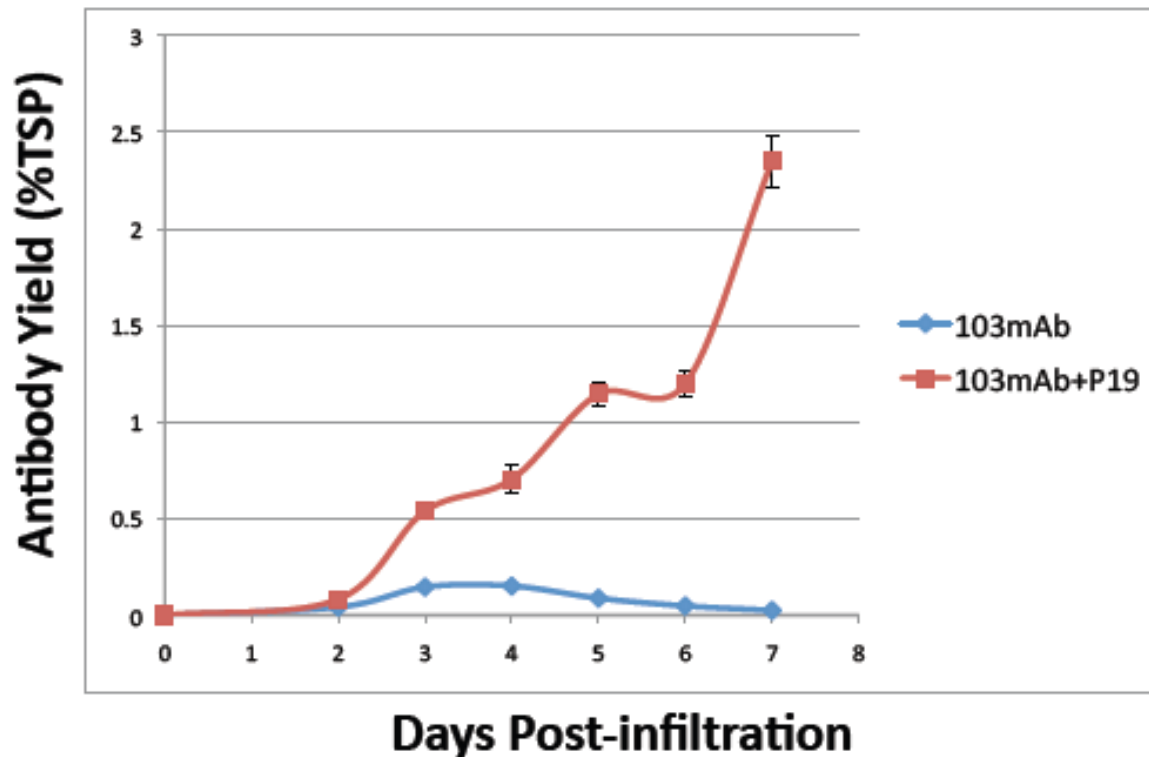
■ HIV/AIDS

- Expression of 3 monoclonal antibody drugs
- Functionality of drugs demonstrated



Novel High Level Production System, P19

High level production of a monoclonal antibody drug in PlantForm's new P19 production system (**red**) compared to standard production system (**blue**)

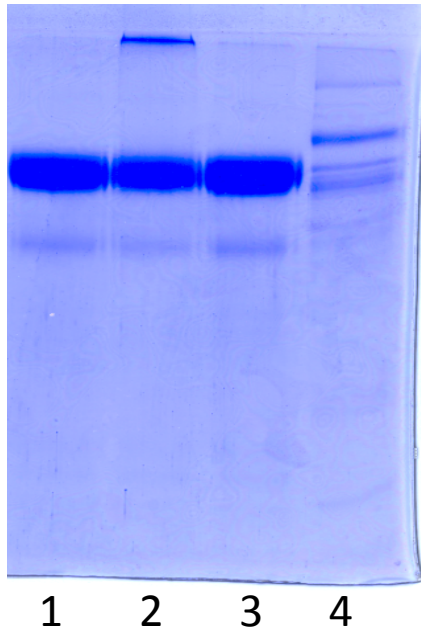




Key Data DARPA and Gates Projects

Butyrylcholinesterase

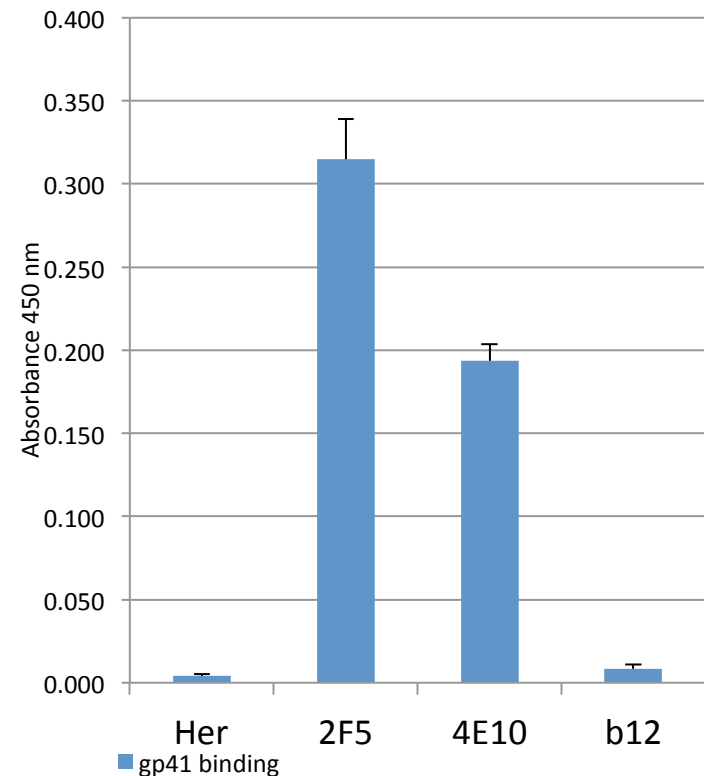
Superior purity compared to commercial standard



1. PlantForm BuChE condition A
2. PlantForm BuChE condition B
3. PlantForm BuChE condition C
4. Commercial BuChE Standard

HIV mAb Drug

Assay demonstrates functionality of plant produced drugs





4 Families of Patents Advancing

- **First Patent on University of Guelph technology issued**
 - USA Patent #8,465,742, “Anti-Cobra Toxin Antibody Fragments and Method of Producing a VHH Library”
 - Term until December 2029
 - Technology is licensed by PlantForm
- **New family of patents submitted for p19 technology**
 - “Vectors and Methods for Enhancing recombinant Protein Expression in Plants”
 - Applications submitted in North America and worldwide
- **Other patent families advancing**
 - PlantForm’s biosimilar trastuzumab (Herceptin®) process has protection until 2031



“Partners to Market” Strategy

- PlantForm Corporation and Brazil-based PharmaPraxis signed a collaboration and license agreement.
- To develop, manufacture and commercialize biosimilar and/or biobetter versions of drugs using PlantForm’s patented plant expression system.
- Targets are six leading monoclonal antibody products that have combined total annual global sales of \$31.5 billion and are scheduled to lose patent protection within the next six years.
- Currently seeking funding to developed a greenhouse manufacturing capability in Brazil and conduct technology transfer of PlantForm technology to PharmaPraxis.



Financing Strategy and Objectives

- **Atlantic Assets Trust**
 - Agreement to invest \$2 million in two tranches
 - Tranche 1 (\$0.7 million) received
 - Tranche 2 (\$1.3 million) dependent on milestones
 - Scale-up biosimilar trastuzumab process
 - Secure \$1.3 million in matching investment
- **Emirates NBD**
 - PlantForm has engaged Emirates NBD Bank, Dubai to seek \$35 million in equity financing in Middle East and Europe
- **Convertible Debenture**
 - \$300,000 secured from two external investors and two members of the management team
- **University of Guelph**
 - The University became a shareholder



Biosimilar Trastuzumab Project Timeline

Milestones	2011-13	2014	2015	2016
Regulatory		EMA Science Advice	Phase I CTA submission	Phase III CTA submission
Process Development & scale-up	Lab process established, tech transfer	Characterize & Stability	Scale-up	Validation
Manufacturing	Tech transfer to CMO, initial scale-up	2 GLP batch 1 GMP batch	5 GMP Batch	5 GMP batch
Preclinical	Characterization & Efficacy studies	Safety & Tox (2 species)		
Clinical			Phase I (30 subjects)	Phase III (350 subjects)
Pipeline Development	2 nd Product Initiated			



Corporate Objectives 2013: Status

Technical Objectives

1	Scale trastuzumab (biosimilar Herceptin) manufacturing process to clinical/early commercial scale	Ongoing
2	Characterization of second biosimilar candidate, Avastin	✓
3	Activity study for HIV/AIDS drug	✓
4	Evaluate Animal Health opportunity	Ongoing

Financing Objectives

1	Advance Bridge and Series A financings	✓
2	Execute DARPA project agreement	✓
3	Secure at least one Canadian/Ontario Government grant/contract	✓



Corporate Objectives 2014: Planned

Technical Objectives

- 1 Manufacture biosimilar trastuzumab (biosimilar Herceptin®) for animal studies and Phase I clinicals
- 2 Advance regulatory submission strategy for biosimilar trastuzumab
- 3 Complete DARPA contract including delivery of product to US Government
- 4 Advance HIV/AIDS project to express further candidates and conduct animal efficacy study

Financing Objectives

- 1 Secure matching funds for Atlantic Assets Trust investment
- 2 Advance Mandate with Emirates NBD bank
- 3 Advance financing of agreement with PharmaPraxis



PlantForm Corporation

Canada



The Honorable Gary Goodyear, Minister of State for Science and Technology, Government of Canada, tours PlantForm's greenhouse with the honorable Frank Valeriotte, Member of Parliament for Guelph

Ontario



The Honorable Reza Moridi, Minister of Research and Innovation, Government of Ontario, tours PlantForm's Guelph Research Facilities