



The Future of Cancer Immunotherapy

**Investor Presentation
January 2020**

BriaCell Therapeutics Corp. (“**BriaCell**”)

Except for historical information, this presentation contains forward-looking statements, which reflect BriaCell’s current expectations regarding future events. These forward-looking statements involve known and unknown risks and uncertainties that could cause BriaCell’s actual results to differ materially from those statements. Those risks and uncertainties include, but are not limited to, our ability to access capital, the successful and timely completion of clinical trials, the receipt of all regulatory approvals and other risks detailed from time to time in our ongoing quarterly and annual filings. The forward-looking statements in this presentation are also based on a number of assumptions which may prove to be incorrect.

Forward-looking statements contained in this presentation represent views only as of the date of this presentation and are presented for the purpose of assisting potential investors in understanding BriaCell’s business, and may not be appropriate for other purposes. BriaCell does not undertake to update forward-looking statements, whether written or oral, that may be made from time to time by or on its behalf, except as required under applicable securities legislation.

- BriaCell Therapeutics Corp. is a clinical stage immunotherapy company developing treatments that boost the ability of the body's own cancer-fighting cells to destroy cancerous tumors including Bria-IMT™ for **Advanced breast cancer** (the cause of over 40,000 deaths per year in the U.S.).
- The company recruited 35 patients showing robust response and is engaged in developing the next generation of HLA-type matching therapies from a simple saliva test.
- Immunotherapy Clinical Pipeline:
 - **Bria-IMT™ combined with immune checkpoint inhibitors**
 - Phase I/IIa combination study with pembrolizumab (Keytruda) dosed 11 patients
 - Safety & efficacy data established in advanced breast cancer.Study now amended to evaluate combination with Incyte drugs.
 - **Bria-IMT™ combined with Incyte's** selected compounds for advanced breast cancer.
 - **Bria-OTS™** "*Off-The-Shelf Personalized*" immunotherapy based on patient's HLA-type.
- **BriaCell Team:**
 - CEO, Dr. William Williams, and his team have been involved in many of drug approvals.
 - Founder, Dr. Charles Wiseman, is a Clinical Professor of Medicine, Keck-USC School of Medicine.



We believe BriaCell's Phase II clinical program in Breast Cancer is ready for partnering

Experienced Drug Development & Financial Team



William V. Williams, MD, FACP, President & CEO, Director

- Former VP, Exploratory Development, Incyte Corporation
- Former VP, Experimental Medicine, GlaxoSmithKline
- Former Head, Rheumatology Research, University of Pennsylvania
- Extensive drug development experience

Charles Wiseman, MD, Co-Founder & Director

- Director, Immunotherapy Lab, St. Vincent Medical Center
- Clinical Professor of Medicine (retired), Keck-USC School of Medicine
- Former Acting Chief of the Division of Oncology/Hematology at the White Memorial Medical Center

Markus Lacher, PhD, Senior Director, R&D

- Founder, T cell Therapeutics, Inc., an immuno-oncology company
- Sr. Clinical Scientist, Cesca Therapeutics, Inc.
- Scientist at BioTime, Inc. and OncoCyte Corporation
- Editorial advisory board; Recent Patents on Anti-Cancer Drug Discovery

Rebecca A. Taub, MD, Director

- Current: CMO & EVP, Director, Founder, Madrigal Pharmaceuticals
- Senior VP, VIA Pharmaceuticals
- VP of Research, Metabolic Diseases, Hoffmann-La Roche Company
- Executive Director, Bristol-Myers Squibb
- Executive Director, Dupont Pharmaceuticals
- Professor of Genetics and Medicine, University of Pennsylvania

Jamieson Bondarenko, CFA, CMT, Chairman of the Board

- Previously Principal and Managing Director of the Equity Capital Markets group of Eight Capital
- Previously several positions at Dundee Securities Ltd., including Managing Director, Director, Vice President and Associate

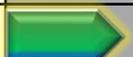
Vaughn Embro-Pantalony, MBA, FCPA, FCMA, CDir, ACC, Director

- Current: Chair, Board of Directors, Soricimed Biopharma Inc.
- Board and Audit Committee Member, Microbix Biosystems Inc.
- VP, Finance & CFO, Teva Novopharm Limited
- VP, Finance & Administration, Bayer Healthcare
- Director, Finance and Administration & CFO, Zeneca Pharma Inc.

Richard J. Berman, JD, MBA, Director

- Current: Director, Advaxis, Inc., Cryoport, Inc., Immuron Limited, Cev & Microbix Biosystems Inc.
- Chairman: Cevolva Biotech, Inc., MetaStat, Inc., & National Investment Managers
- Director & Chairman & CEO: Nexmed Inc. (Apricus Biosciences, Inc) & Internet Commerce Corporation (Easylink Services); Director, Catasys, Inc.
- Director, Stern School of Business of NYU

CEO involved in eleven drug approvals

Therapeutic	Indication	Preclinical	Phase I	Phase II	Phase III	
Bria-IMT™ with KEYTRUDA®	Advanced Breast Cancer (3 rd + line)					
Bria-IMT™ with Incyte compounds	Advanced Breast Cancer (3 rd + line)					
Bria-OTS™	Breast Cancer					
Bria-IMT™	Early Breast Cancer (2 nd line)					
NICL1*	Prostate Cancer					
NICL2*	Non-Small Cell Lung Cancer					
NIT1**	Prostate Cancer					
NIT2**	Breast Cancer					
PKCδi***	RAS Transformed Cancers					
NICL3*	Melanoma					

- * NICL = Novel Immunotherapy Cell Lines
- ** NIT = Novel Immunotherapy Technology (non-cellular)
- *** PKCδi = Protein kinase C delta inhibitor

BriaCell has a robust immunotherapy pipeline

Big Pharmaceutical Companies Are Active

- Partnership & collaboration opportunities exist in the advanced breast cancer oncology market, particularly in immunotherapies, which directly stimulate the body's own cancer-fighting cells to attack and destroy breast cancer tumors.
- **BriaCell's approach is Targeted Immunotherapy; not CAR-T or gene therapy.**
- **BriaCell has had collaboration discussions with several 'Big Pharma' companies.**
- **We believe BriaCell's Phase I/IIa safety & efficacy show similar or superior results to those of other advanced or approved drugs for breast cancer when they were at a similar clinical stage of development.**

Lilly eyes more cancer deals, but wary of CAR-T, gene therapy

Eli Lilly and Co remains in the hunt for cancer drugs even after announcing an \$8 billion purchase of Loxo Oncology this week...

-- Reuters; January 11, 2019

Bristol-Myers Reports Higher Sales but Another Lung-Cancer Setback

Merck's Keytruda immunotherapy scored a major advantage when it received U.S. approval for newly diagnosed lung-cancer patients, while Bristol's Opdivo immunotherapy failed a trial to show its effectiveness in the patients..

-- The Wall Street Journal; January 25, 2019

GlaxoSmithKline to look for early-stage assets: CEO

GlaxoSmithKline Plc will actively look to buy early-stage assets and partner with companies, the drugmaker's chief executive officer said Tuesday. ... she said GlaxoSmithKline had almost doubled the size of its immuno-oncology pipeline over the past few months.

-- Reuters; January 8, 2019

Agenus shares soar after cancer therapy deal with Gilead

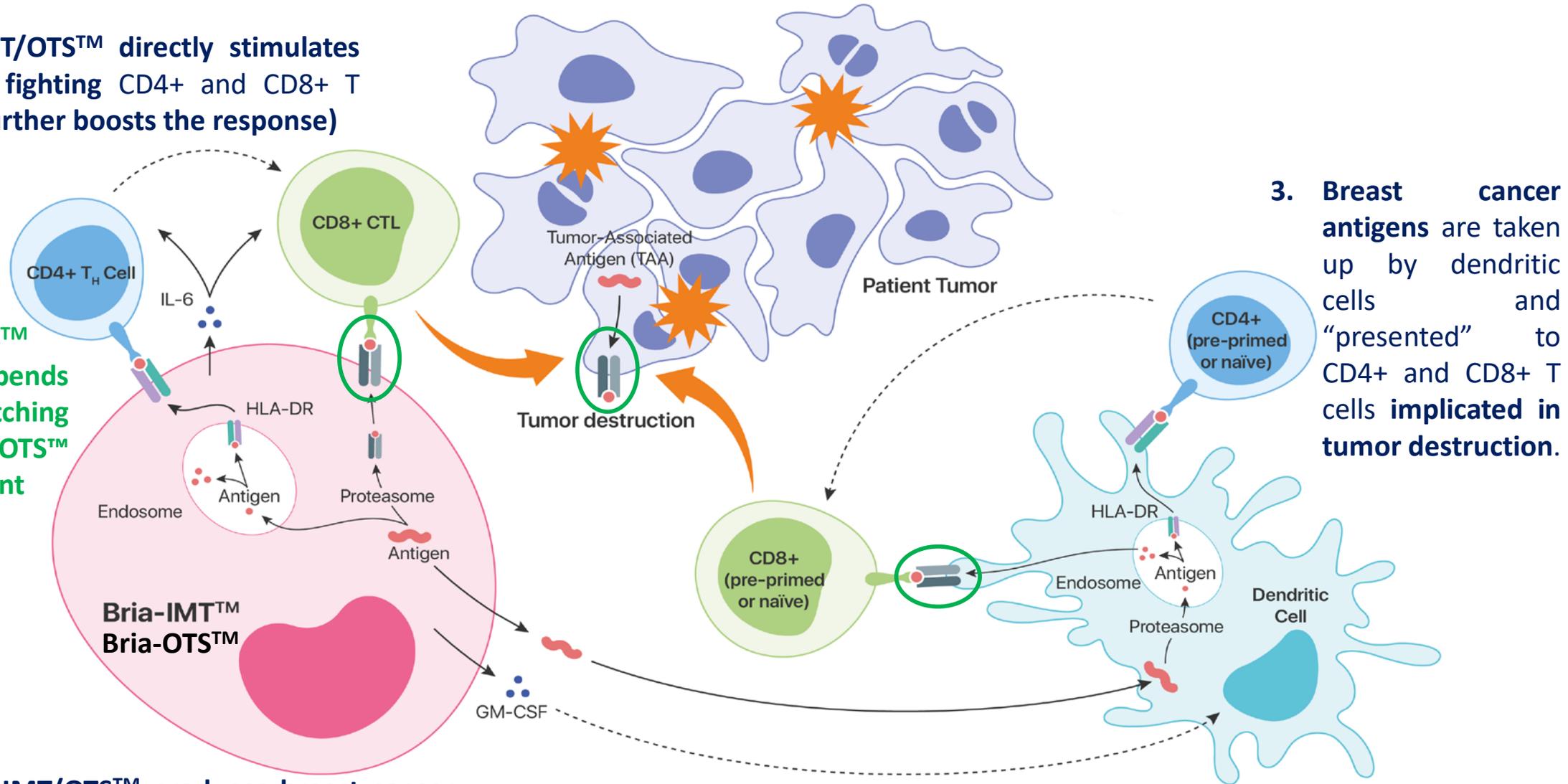
...the company said it would develop and market up to five of its immuno-oncology therapies in partnership with Gilead Sciences Inc.

-- Reuters; December 20, 2018

There are many Business Development Opportunities with Big Pharma

4. Bria-IMT/OTS™ directly stimulates cancer fighting CD4+ and CD8+ T cells (further boosts the response)

5. Bria-IMT/OTS™ efficacy depends on HLA matching of Bria-IMT/OTS™ and the patient



1. Bria-IMT/OTS™ produces breast cancer antigens (proteins made by breast cancer cells)

2. Bria-IMT/OTS™ secretes GM-CSF which further promotes dendritic cell-based antigen presentation (boosts the response)

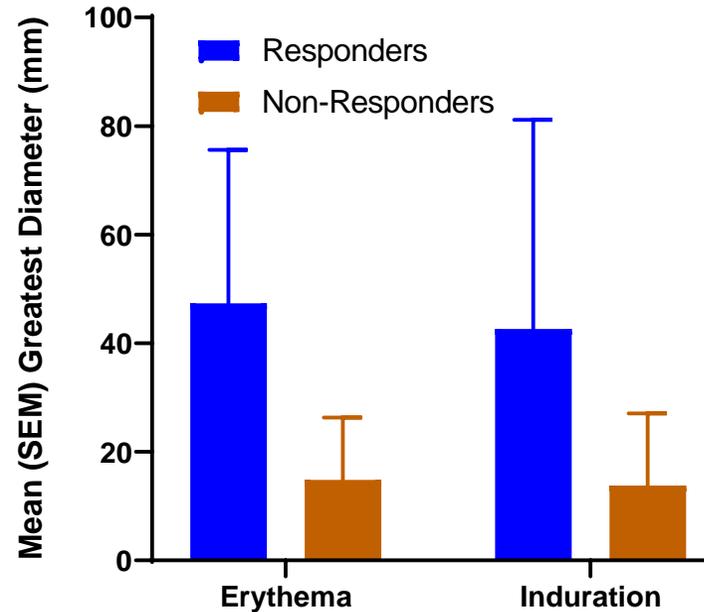
Bria-IMT™ is Strongly Immunogenic

Breast Cancer Antigens Expressed by Bria-IMT™

ABCA12	C5orf46	EIF3H	IRX3	MIEN1	PIGK	SLC35A2	UBR5
AKR1B15	CABYR	ERBB2	KIF2C	MTHFD2	PLAC1	SPAG1	VTCN1
AKR1C2	CBX2	FOXI1	KRT15	MYEOV	PRAME	STAC2	XDH
ALDH3B2	CCL28	HIST1H2AE	KRT17	NQO1	PTHLH	STARD3	XPOT
ALG8	CENPN	HIST1H2BG	KRT19	OIP5	RFC5	STC2	
ARHGEF38	COL8A1	HIST1H4H	KRT81	PAK1	RSF1	SYCP2	
ARPC5L	DCAF10	IGFBP5	LMX1B	PBK	SCGB1D2	SYNE4	
ATP6V1B1	DHRS2	IL22RA2	MGAT4A	PDCD6	SCGB2A2	TFAP2A	
AWAT2	DUSP4	INTS7	MGP	PDRG1	SFRP1	TNPO1	
AZIN1	EFHD1	IRX2	MIA	PGAP3	SHB	TRPS1	

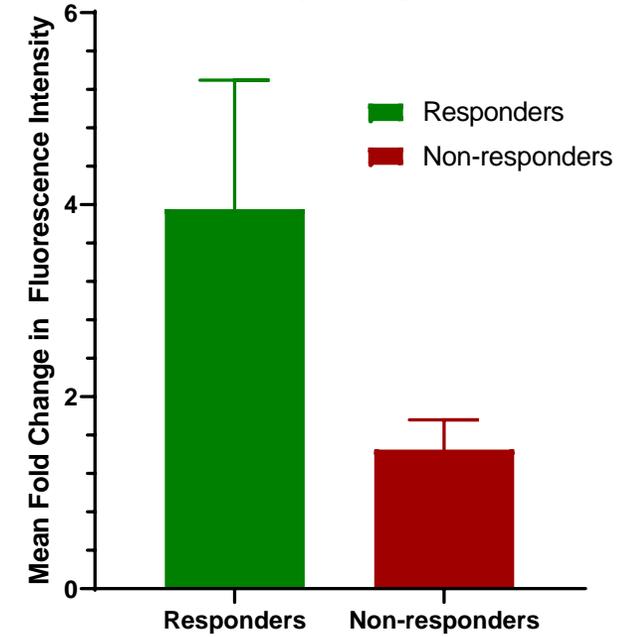
Bria-IMT™ expresses dozens of breast tissue and breast cancer antigens

Cellular Immune Responses



Bria-IMT™ elicits a strong cellular immune response, especially in responders

Antibody Responses



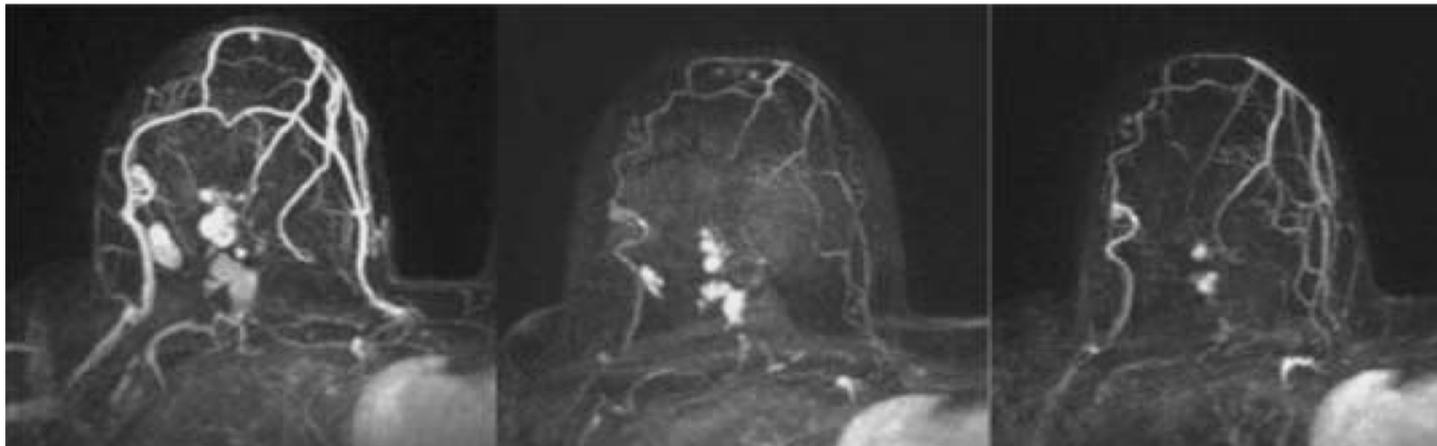
Bria-IMT™ elicits a strong antibody response, especially in responders

Bria-IMT™ expresses multiple potential antigens and induces a strong immune response

Positive Human Proof-of-Concept Trials in Advanced Breast Cancer

- 1999-2003 & 2004-2006, Dr. Charles Wiseman (current BriaCell Director)
- Bria-IMT™ was developed from a breast cancer cell line called SV-BR-1

	1999 – 2003 (SV-BR-1)	2004 – 2006 (Bria-IMT™)
Patients	N=14 late stage	N=4 late stage
Safety Profile	Well tolerated; no severe AEs	Well tolerated; no severe AEs
Median Survival	12.1 months	35 months



Baseline

3 Inoculations (2 months)

6 Inoculations (5 months)

Patient A002 – Robust Responder

Patient A002 was treated with the Bria-IMT™ regimen and had a robust response with substantial tumor regression in the breast and bone, and complete clearance in the lungs and soft tissues.

Is this the KEY?... Patient A002 had key HLA-types that matched with Bria-IMT™

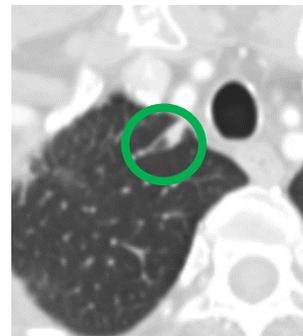
Mechanism of Action & Proof-of-Concept (Dec 2018)

- 23 patients were dosed in the 2017-2018 study, all very heavily pre-treated (with chemotherapy).
- Safety & Efficacy Data:** We believe the data was similar or superior to those of other advanced or approved drugs for breast cancer when they were at a similar clinical stage of development.
- Findings:** BriaCell has closed enrollment for this Bria-IMT™ monotherapy study.

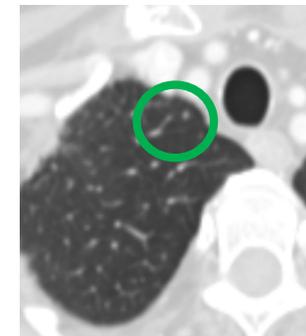
HLA-Type Matching and Biological Activity (original patients + phase I/IIa data)

Patients	HLA Match	Tumor Shrinkage	Tumor Shrinkage in Immune Responders*
N=6	≥ 2	50%	75%
N=20	≥ 1	20%	27%
N=7	0	0%	0%

*Immune response measured by delayed-type hypersensitivity.



Pre-Treatment

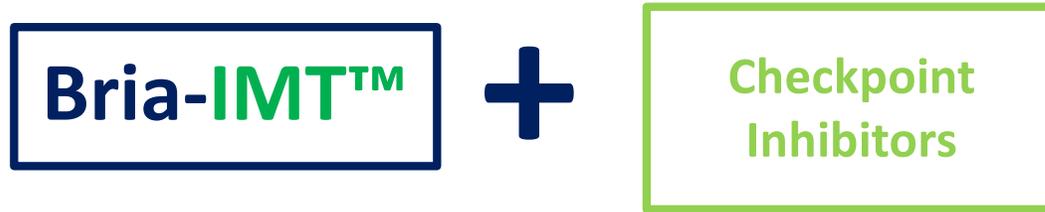


Post-Treatment

Patient 01-002 – Two HLA Matches

Patient 01-002 was treated with the Bria-IMT™ regimen and had what we conclude was a robust response, specifically substantial tumor regression in 20 lung metastases that all either disappeared or shrunk to tiny scars.

HLA Matching Hypothesis: We believe tumor regression is most pronounced in patients who match Bria-IMT™ at specific HLA-types & develop an immune response



How Do Checkpoint Inhibitors Work?

- PD-L1 molecules block immune cells from attacking cancer cells
- Immune checkpoint inhibitors (such as pembrolizumab (KEYTRUDA®)) are designed to neutralize this immune suppression in cancer patients

Why did we combine Bria-IMT™ with KEYTRUDA®?

- BriaCell has observed PD-L1 expression on circulating cancer cells & cancer-associated cells in >90% of patients
- Checkpoint inhibitors such as KEYTRUDA® **decrease immune suppression** caused by PD-L1 molecules while **Bria-IMT™ increases the immune response**
- **BriaCell's hypothesis:** Checkpoint inhibitors act by "awakening" a component of the immune system, while Bria-IMT™ "puts the foot on the gas" of the immune system, which may lead to more powerful anti-tumor activity
- This combination has been evaluated with evidence of additive or synergistic activity

We believe the combination of Bria-IMT™ with checkpoint inhibitors such as KEYTRUDA® may induce a more potent anti-cancer response

Phase I/IIa Combination Study

- Patients were treated with the combination of Bria-IMT™ and anti-PD-1 antibody KEYTRUDA®.
- **We believe that an excellent safety and tolerability profile** on the first 11 patients was observed.
- All 11 patients were very heavily pre-treated with a median of 5 prior systemic therapy regimens (such as chemotherapy).
- Most had very weak immune systems, further emphasizing the importance of what we believe were the positive results observed.
- As BriaCell had been purchasing the KEYTRUDA® for the study, the study was switched to evaluating combination therapy with Incyte drugs
- **Several Remarkable Responders noted**

Rolled-over from Bria-IMT™ study

Patient	HLA Match	Observations
1	0	Notable reduction in sum of diameters of target liver metastases (breast cancer tumors in the liver)

- She had 8 prior chemotherapy regimens with extensive tumor growth in her liver.
- She is not an HLA match with Bria-IMT™ suggesting that—in combination with KEYTRUDA®—tumor reduction may occur without a match with Bria-IMT™.

Remarkable Responder announced Sept. 2019

Did not roll over

5	2	Notable reduction in longest diameter of breast cancer tumor in the adrenal, with reductions in orbital (behind the eye) brain lining metastases.
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- She had failed 12 prior regimens with 16 agents (13 chemotherapy and 3 hormonal).
- Match at HLA-C and HLA-DRB3 loci.

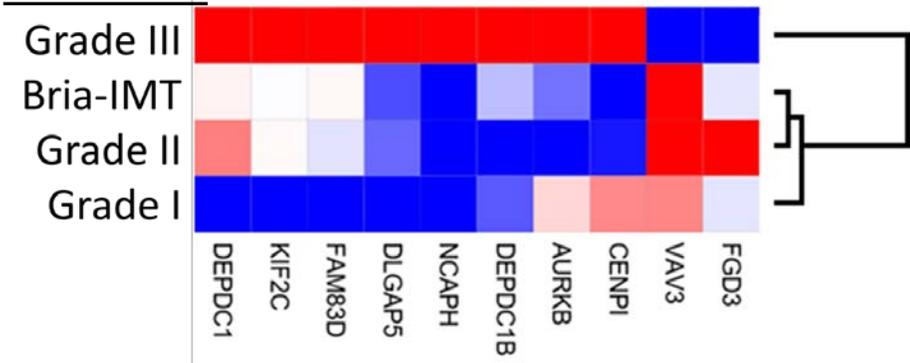
We believe these findings support BriaCell’s hypothesis: Evidence of rapid additive or synergistic anti-tumor activity

Breast Cancer by Stage of Differentiation

- Breast cancer is classified based on histology into Luminal, Basal A and Basal B subtypes (Neve et al., 2006), with Luminal A representing well differentiated (grade I), Basal B poorly differentiated (grade III), Basal A moderately differentiated (grade II).
- Bria-IMT™ is derived from a grade II (moderately differentiated) breast cancer and is most closely related to grade II and grade I cell lines
- Approximately 40% of recurrent breast cancers are grade I/II (~33% grade II and ~7% grade I).

Hierarchical clustering of breast cancer cell lines. Bria-IMT™ cells cluster most closely to MDA-MB-468 (grade II). The MDA-MB-468 cell line represents Basal A (moderately differentiated = grade II), MCF-7 luminal (well differentiated = grade I), and MDA-MB-231 Basal B (poorly differentiated grade III) breast cancer cell types. Therefore, based on its molecular similarity with MDA-MB-468, **Bria-IMT™ is considered a Basal A and as such a moderately differentiated (grade II) cell line.**

Cell Lines

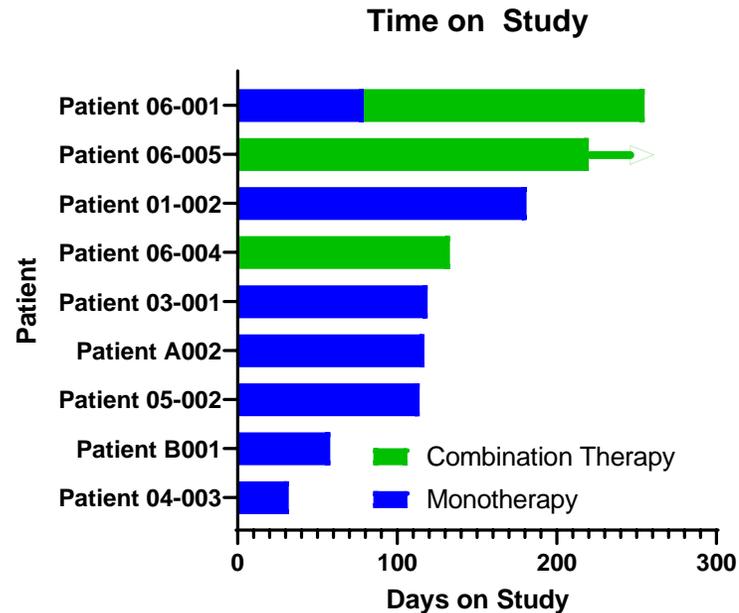
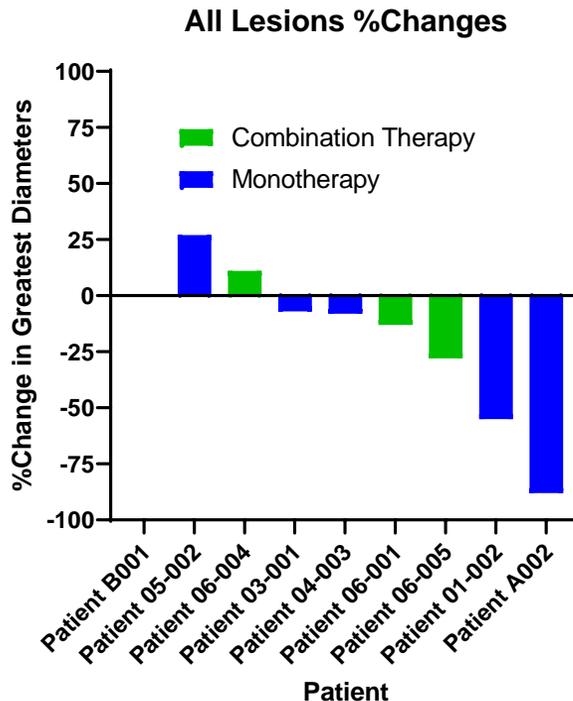


Bria-IMT™ most closely matches with Basal A (moderately differentiated = grade II, closely related to well differentiated = grade I).

Breast Cancer Grade Correlates with Response

- The clinical benefit rate in our monotherapy studies for Grade I/II patients with immune responses was 5/7 (71%)
 - Patients very heavily pre-treated, median of 7 prior regimens
- In our combination therapy study with checkpoint inhibitors, all 3 patients with Grade I/II tumors had clinical benefit (100%)
 - All had been very heavily pre-treated with 14-15 prior regimens

Tumor shrinkage seen in most patients with Grade I/II Tumors. Patients with the greatest tumor reductions had double HLA matches with Bria-IMT™



We believe these findings identify a patient population with higher clinical benefit rates

Extensive time on study especially with combination therapy suggesting clinical benefit

BriaCell & Incyte Collaboration and Supply Agreement

Non-exclusive clinical trial collaboration to evaluate the effects of combinations



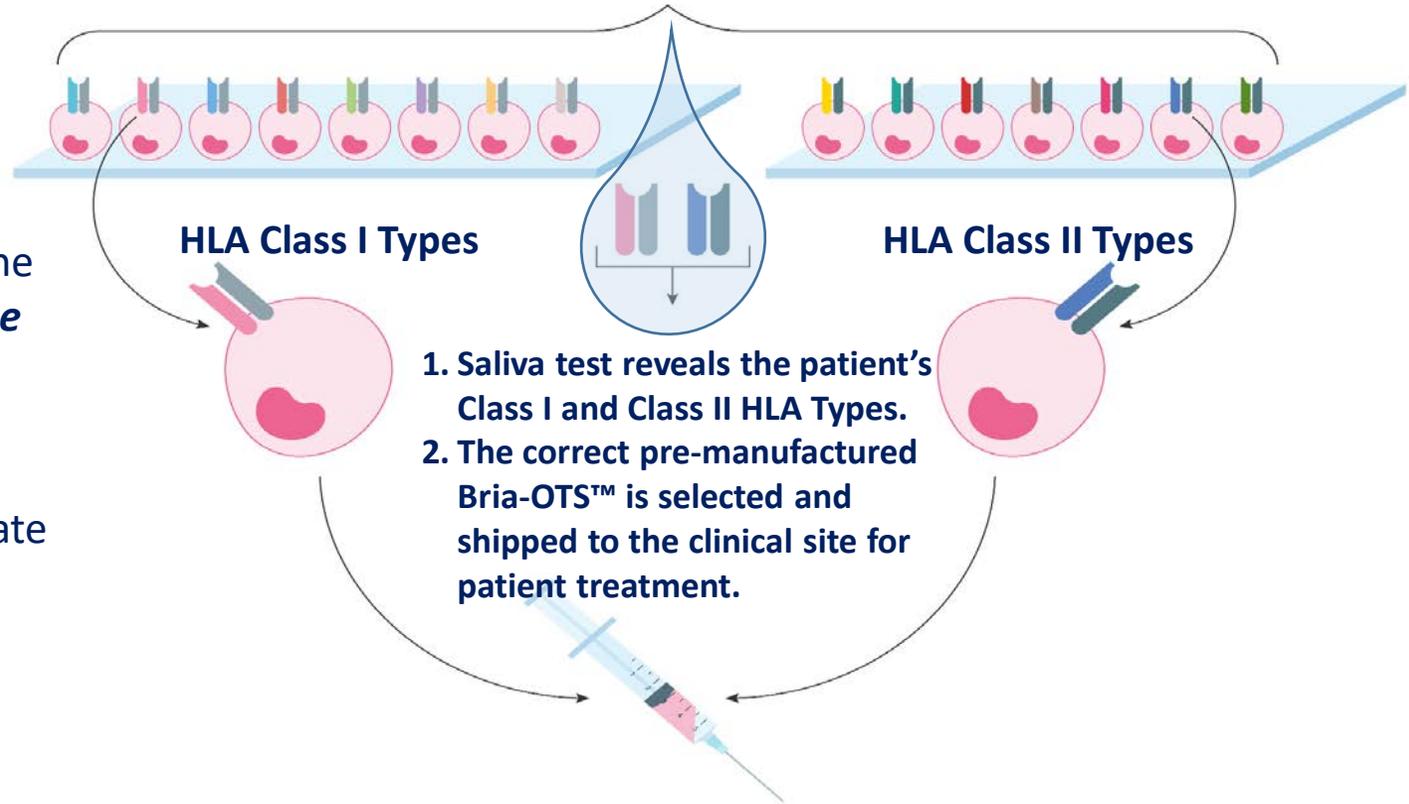
- The clinical study will focus on BriaCell's lead candidate, Bria-IMT™, in combination with Incyte's selected compounds for advanced breast cancer.
- Incyte to provide compounds from its development portfolio, including an anti-PD-1 monoclonal antibody (*INCMGA00012*), and an IDO1 inhibitor (*epacadostat*), for use in combination studies with BriaCell's lead candidate, Bria-IMT™.
- **Incyte** is a global biopharmaceutical company focused on discovering and developing novel therapeutics in oncology and inflammation & autoimmunity.
- Initial data on the first patient who transitioned from combination therapy with KEYTRUDA® to the combination with INCMGA00012 shows continued stable disease and **complete disappearance of an orbital tumor** (behind the eye) which had been pushing her eye forward. She remains on study after 36 weeks of combination therapy.

BriaCell hypothesizes that checkpoint inhibitors, of which Incyte has several candidates, may, in our opinion, significantly amplify the tumor-reducing effects of Bria-IMT™

Bria-OTS™: *Off-The-Shelf* Personalized Immunotherapy

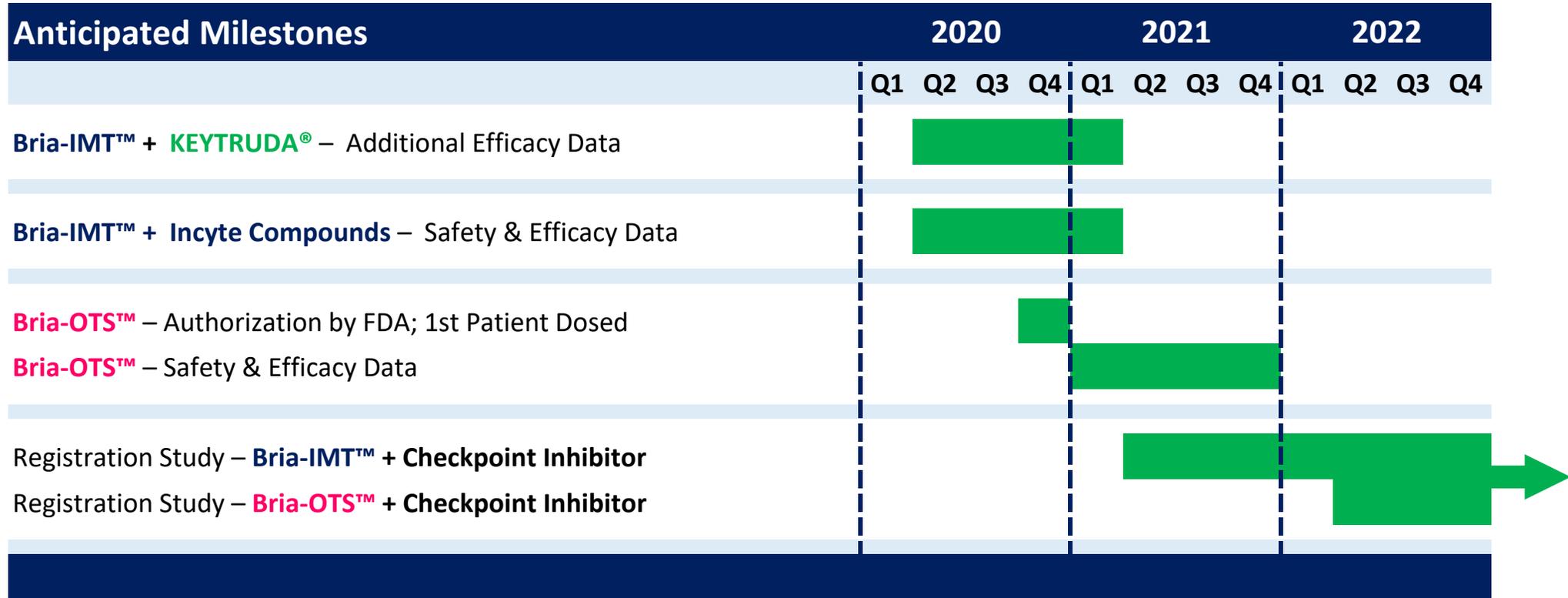
Confirmation of “Matching Hypothesis” resulted in BriaCell’s “OTS” strategy

- BriaCell’s treatment appears most effective when the patient’s **HLA-type** matches the Bria-IMT™ **HLA-type**
- **Bria-OTS™** starts with a simple saliva test to determine the **HLA-type** of each patient
- Each patient will then be treated with the appropriate pre-manufactured **Bria-OTS™** cell line
- BriaCell is engineering **15 unique HLA types (molecules)**, collectively referred to as **Bria-OTS™**, allowing for what we believe will be treatment of over 99% of patients



Personalized Therapy without the need for Personalized Manufacturing

Development Timeline & Catalysts



Clinical data to be submitted to key scientific meetings including AACR, ASCO and the San Antonio Breast Cancer Meeting

Financial Information & Insider Ownership



Data as of Jan 3, 2020

BCT: TSX Venture

BCTXD: OTCQB

Recent Share Price (C\$)	\$12.00
Basic Shares Outstanding (in thousands)	722.0
Fully-Diluted Shares Outstanding (in thousands)	936.5
Basic Market Capitalization (C\$MM)	\$8.7
Insider Ownership	33.5%

Insiders	Shares	% Basic
Jamieson Bondarenko	119,856	16.6%
Dr. William Williams	67,064	9.3%
Dr. Charles Wiseman	44,604	6.2%
Other	10,333	1.4%
TOTAL	241,858	33.5%

Insider holdings exclude warrants and options

* 178.5 thousand warrants at C\$44 WAEP, 13.8 thousand compensation warrants at C\$45 WAEP, and 21.3 thousand options at C\$50 WAEP.

- **Immunotherapy approach**
 - Subject of many recent deals with big pharma companies.
- **Targets advanced breast cancer**
 - High unmet need with what we perceive are multiple regulatory advantages (fast track, accelerated review, etc.)
- **Several remarkable results in clinical trials to date:**
 - Patients who have failed all available therapies have shown what we perceive are remarkable tumor regressions.
 - Dosing very safe and well tolerated
 - Combination with immune checkpoint inhibitor appears safe and suggests what we view as evidence of additive or synergistic activity → study amended to evaluate combination with Incyte immunotherapy drugs
 - Patients with Grade I/II tumors have a high rate of clinical benefit
 - Combination study with Incyte PD-1 inhibitor + other immune checkpoint inhibitor is ongoing
- **Multiple catalysts in 2020**
 - Includes planned presentations at several scientific meetings such as the American Association of Cancer Research (AACR), American Society of Clinical Oncology (ASCO), and the San Antonio Breast Cancer Meetings
- **Highly Experienced Management Team**
 - CEO has been involved in eleven drug approvals.
 - ~\$5M current management and board investment; largest shareholders.

We believe BriaCell is Poised to Execute the Clinical Strategy with a Transformational Technology



BriaCell Therapeutics Corp.

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Thank you