ImmunoCellular

Immunocellular Therapeutics Ltd.

Forward-Looking Statements

This presentation contains forward-looking statements. All statements other than statements of historical facts contained in this presentation, including statements regarding our plans, timelines, prospects, objectives, expectations and intentions with respect to the potential for success of our potential products, cancer immunotherapy research, development efforts and timelines, regulatory status, business, operations, intellectual property, financial condition and other statements that are not historical in nature, are forward-looking statements.

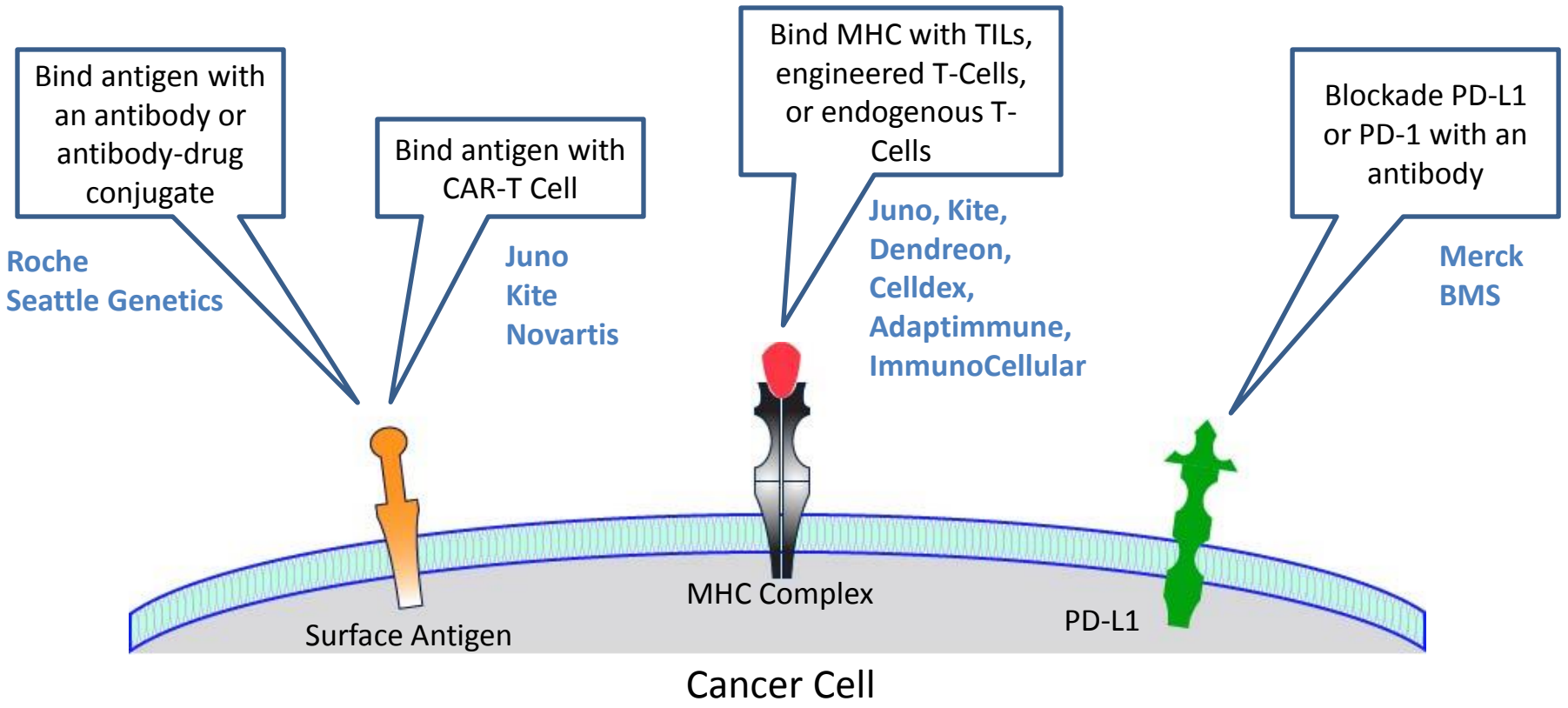
You should consider forward-looking statements carefully because they may include statements regarding our future expectations or projections about future events. These statements involve known and unknown risks, uncertainties, assumptions and other factors, including those described in our filings with the Securities and Exchange Commission (SEC).

You are cautioned that forward-looking statements are not guarantees of future performance. The forward-looking statements included in this presentation are made only as of the date of this presentation, and, except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons why actual results could differ materially that those anticipated in the forward-looking statements, even if new information becomes available in the future.

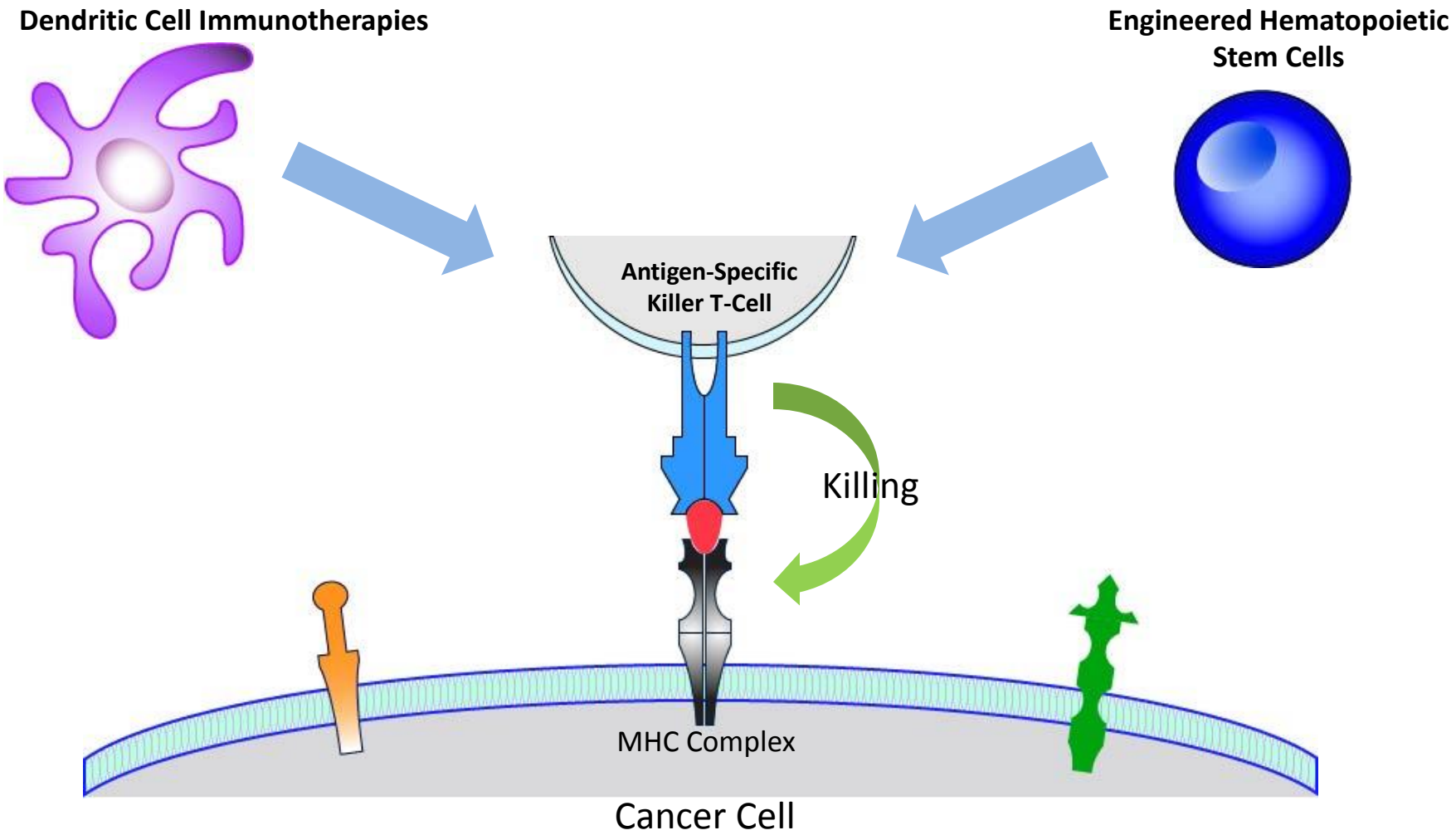
ImmunoCellular is Building a Cancer Immunotherapy Company, Leading with the Phase 3 GBM Program

- Multiple opportunities for building shareholder value in 2015-2016
  - Initiate registrational Phase 3 program for ICT-107 in US, Canada and EU in newly diagnosed glioblastoma; US sites opening now
  - Stem-to-T-cell program driving toward a clinical candidate; research collaboration with MD Anderson
  - ICT-121 phase 1 trial in recurrent glioblastoma enrolling; potential data in 2016
  - Continued evaluation of inbound opportunities to build our pipeline

Immunotherapy Strategies are Leading the Fight Against Cancer



IMUC Advantage: Two Therapeutic Approaches to Achieve T-Cell Killing of Cancer Cells

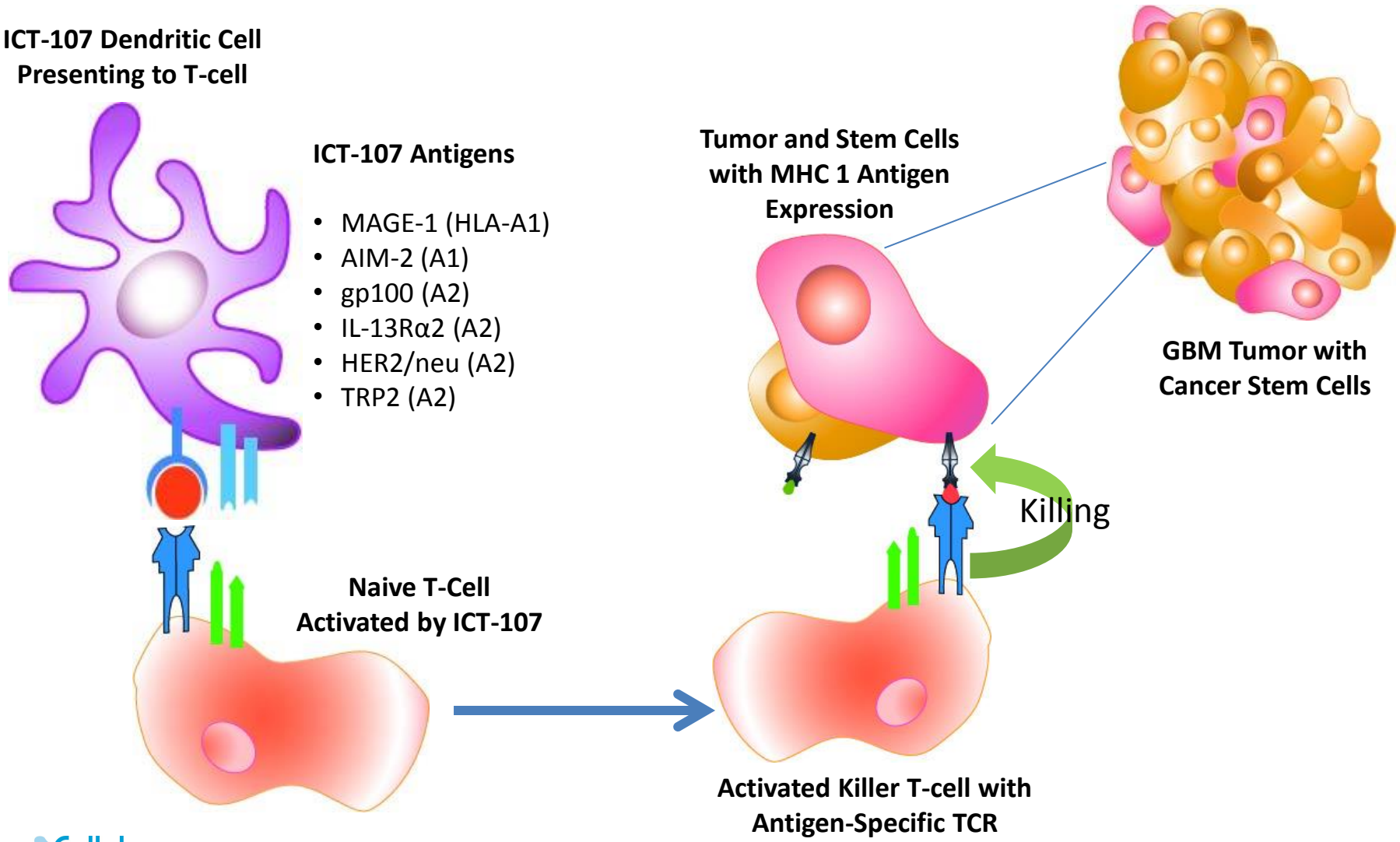


IMUC Pipeline

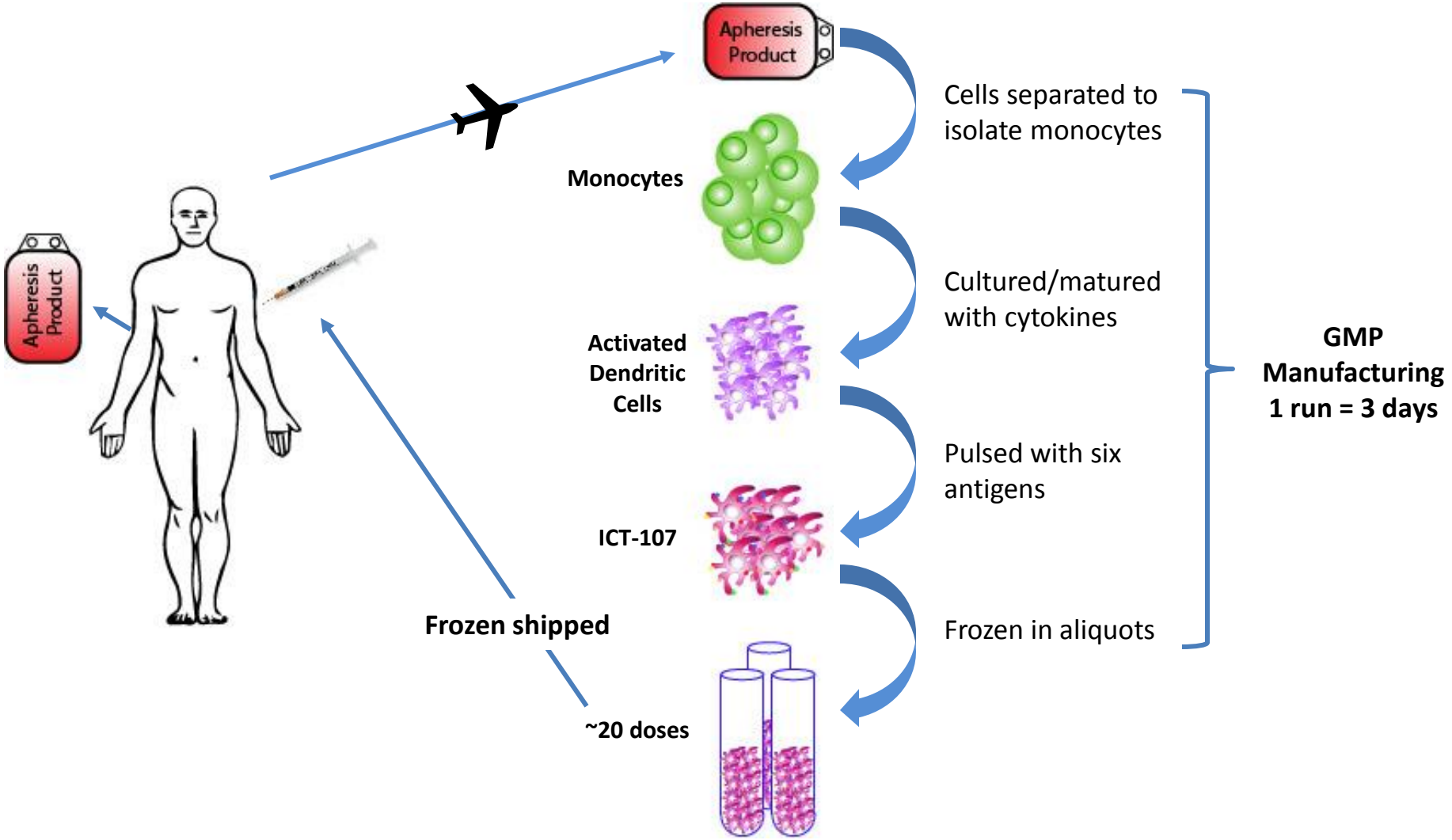
Program Name (Developmental Focus)	Pre Clin	Phase 1	Phase 2	Phase 3
ICT-107 (Newly Diagnosed Glioblastoma)				US Sites Open
• 6 antigen DC-based immunotherapy for HLA-A2 patients				
ICT-121 (Recurrent Glioblastoma)		Enrolling		
• 1 antigen / 2 epitope DC-based immunotherapy for HLA-2 patients				
Stem-to-T-Cell Therapy (Cancer)	Research Commenced			
• New program using hematopoietic stem cells to create antigen-specific T-cell therapies				
ICT-140 (Ovarian Cancer)			Ph 1/2 On hold*	
• 7 antigen DC-based immunotherapy for HLA-2 patients				

* Resource dependent - awaiting partnership or other financing

ICT-107 for the Treatment of Newly Diagnosed GBM

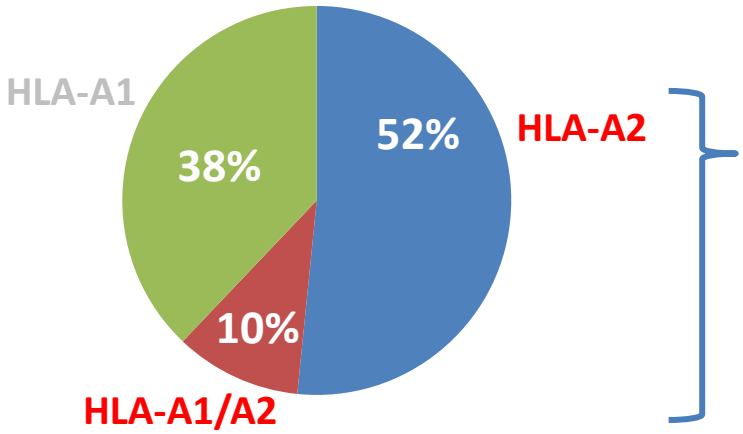


Efficient, Cost-Effective Manufacturing: One Run from Patient's Own Cells Yields 20-50 Doses



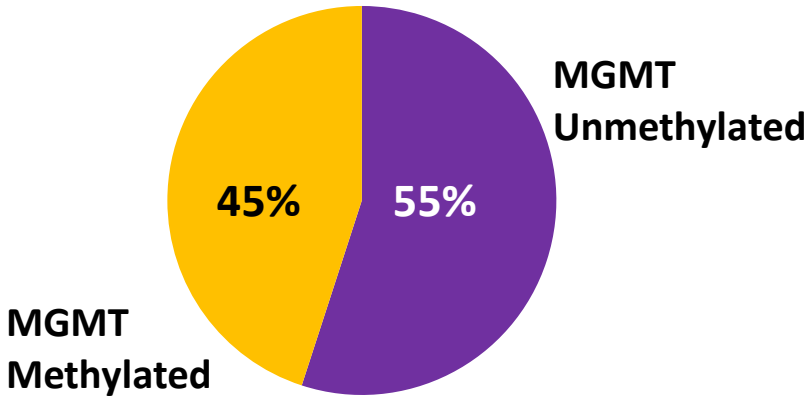
The Phase 2 Trial Identified a Major Subgroup Where ICT-107 Benefit was Clear

Total Trial = 124 Patients



- ICT-107 showed trend benefit in overall survival and statistical benefit in progression free survival
- The ICT-107 treatment effect was concentrated in HLA-A2 patients

69 HLA-A2 and HLA-A1/A2 Patients



- Patient's MGMT methylation status predicts their response to chemotherapy and their survival time
- ICT-107 appears to have effect in both groups

The Phase 2 Survival (OS and PFS) Results in the Predefined Subgroups Supports Moving to Phase 3

Group (n)	Statistic	Value
ITT (124 patients, 81 active, 43 control)	OS – log rank p-value	0.436
	OS – HR	0.846
	PFS – log rank p-value	0.033
	PFS – HR	0.640
PP HLA-A2* MGMT UnMeth (24 active, 14 control)	OS – log rank p-value	0.326
	OS – HR	0.704
	PFS – log rank p-value	0.364
	PFS – HR	0.720
PP HLA-A2* MGMT Methylated (17 active, 14 control)	OS – log rank p-value	0.645
	OS – HR	0.800
	PFS – log rank p-value	0.004
	PFS – HR	0.257

Statistic	ICT-107	Control	
Median OS	18.3 mo	16.7 mo	1.6 mo 10% increase
Median PFS	11.4 mo	10.1 mo	1.3 mo 13% increase
Median OS	15.8 mo	11.8 mo	**4.0 mo 34% increase**
Median PFS	10.5 mo	6.0 mo	**4.5 mo 75% increase**
Median OS	37.7 mo	23.9 mo	**13.8 mo 58% increase**
Median PFS	24.1 mo	8.5 mo	**15.6mo 184% increase**

* Includes HLA-A1/A2 dual positive patients

Note: p-values and HRs are stratified for age and MGMT where appropriate; OS data are from October 2015 update; PFS data are from October 2014 update

The Phase 2 ELISPOT Immune Response Data Inform Improvements in the Phase 3 Design

Comparison	Results	Implications for phase 3
Immune response association with HLA status	• HLA-A2+ patients have a higher immune response rate (50%) than HLA-A1+ (34%) • Fisher's exact p=0.0578	• Supports phase 3 population of HLA-A2+ only
Immune response association with OS	• Log rank test of survival difference in HLA-A2+ patients for immune responders vs non-responders is statistically significant with p=0.0084	• Additional doses may help drive higher immune responses
Immune response association with treatment group	• HLA-A2+ ICT-107 treated patients have a higher immune response rate (60%) than controls (36%) • Fisher's exact p=0.0512	• Changing control to monocytes which are less effective than DCs at driving an anti-tumor response
ICT-107 immune responders associated with survival	• ICT-107 HLA-A2+ patients with an immune response have median OS of 22.5 months versus non-responders with median OS of 15.2 months • Log rank test of survival is statistically significant with p=0.0147	• Additional dose may help drive higher immune responses
DC IL-12 secretion association with immune response	• For HLA-A2+, 70% of high IL-12 patients were immune responders compared with 43% of low IL-12 patients • Fisher's exact p=0.0419	• Changing control to monocytes which are less effective than DCs at driving an anti-tumor response
Immune response not associated with MGMT	• No statistical difference in immune response rates between MGMT methylated and unmethylated patients	• Supports phase 3 population that includes both MGMT types

Phase 3 Design: Special Protocol Assessment Reached with FDA; Key Design Elements De-Risked

Design
- Double blind, placebo-controlled phase 3; placebo is patient's own monocytes
- ~120 US, Canada, EU sites in collaboration with cancer cooperative groups

Population
- ~400 HLA-A2 patients post-surgery and chemoradiation
- Similar entry criteria to phase 2 design with reconfirmed stable disease at randomization
- Stratified for age, MGMT, and resection status

Endpoints
- Overall survival – registrational endpoint recommended by FDA/EMA
- Overall survival in MGMT subgroups
- Progression-free survival
- Safety
- Disease progression determination by iRANO criteria

Regimen
- SOC +/- ICT-107 immunotherapy
- Induction immunotherapy (4 in month 1) and maintenance (monthly through month 12 or progression)

Duration
- 2 years to enroll
- 2-3 years to follow-up
- Futility interim analysis at 33% of events (~2 yrs)
- Efficacy interim analysis at 60% of events (~2.5 yrs)

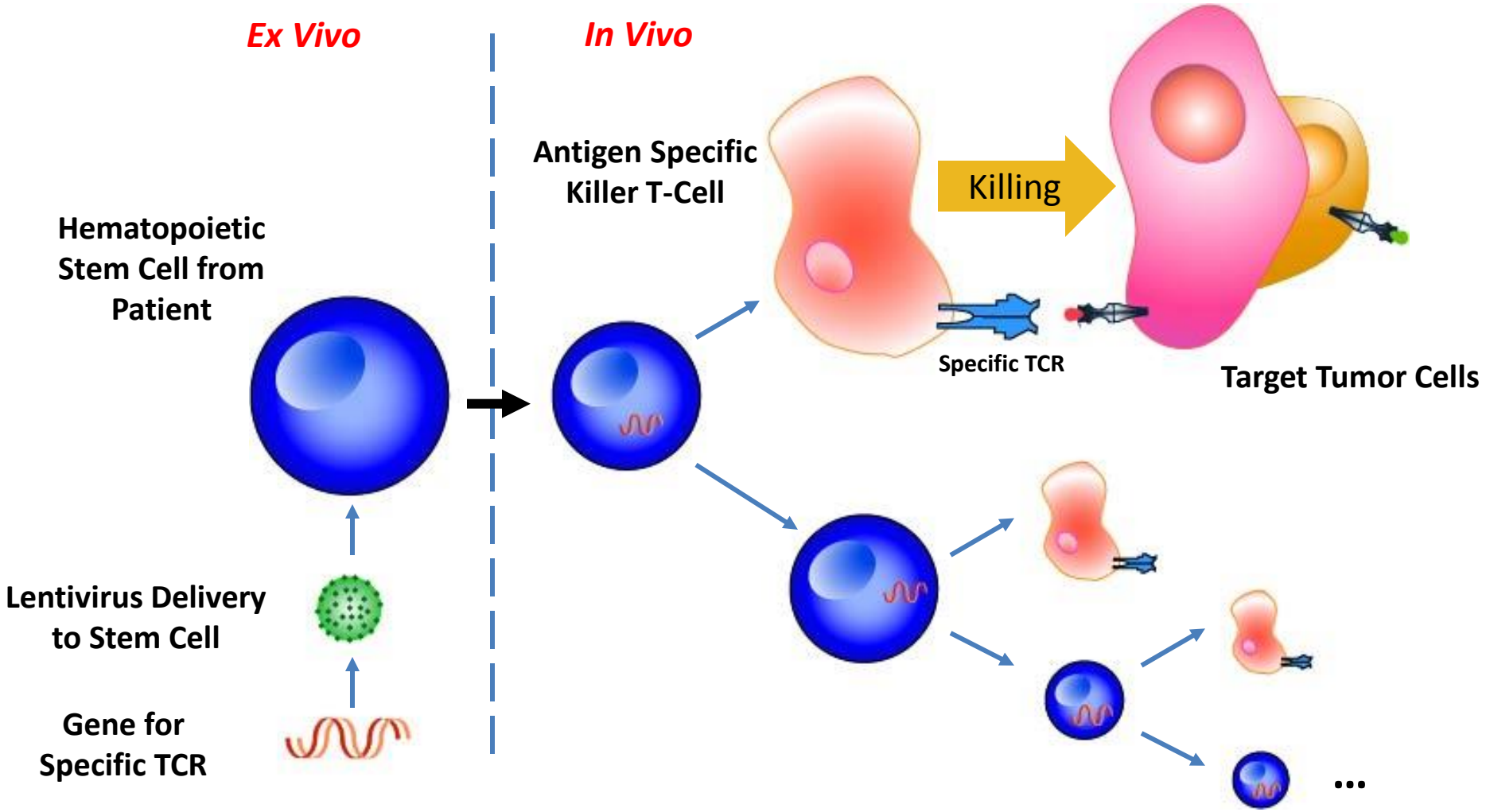
ICT-107 is Positioned Well in the Competitive Immuno-Oncology Landscape for Newly Diagnosed Glioblastoma

Company	Program	Status	Comment
ImmunoCellular	• **ICT-107** • **6-antigen DC-based immunotherapy for HLA-A2 patients**	• **Completed controlled phase 2 trial with OS endpoint** • **Entering phase 3 with OS endpoint**	**Only controlled phase 2 immunotherapy trial to show benefit on a clinical outcome (PFS)**
Northwest Bio	• DCVax-L • Tumor lysate DC vaccine	• Completed uncontrolled phase 1 • Enrolling phase 3 with PFS endpoint	Phase 3 modified multiple times and has PFS primary endpoint - FDA and EMA specify OS as registrational endpoint
Agenus	• Prophage • Tumor lysate and heat shock protein	• Completed uncontrolled phase 2 with OS endpoint • Planning phase 3	Indicated that they are looking for a partner
Celldex	• Rindopepimut • EGFRV3 antigen vaccine for patients expressing EGFRV3	• Completed uncontrolled phase 2 with PFS endpoint • Fully enrolled phase 3 with OS endpoint	Well-designed phase 3 program that addresses <15% of GBM market; 745 patients in 22 countries in trial
BMS	• Checkpoint inhibitors	• Testing in newly diagnosed and recurrent GBM for safety and OS	Testing CTLA4 and PD1 alone and in combination
Merck	• Checkpoint inhibitors	• Testing in phase 1/2	Unknown patient population

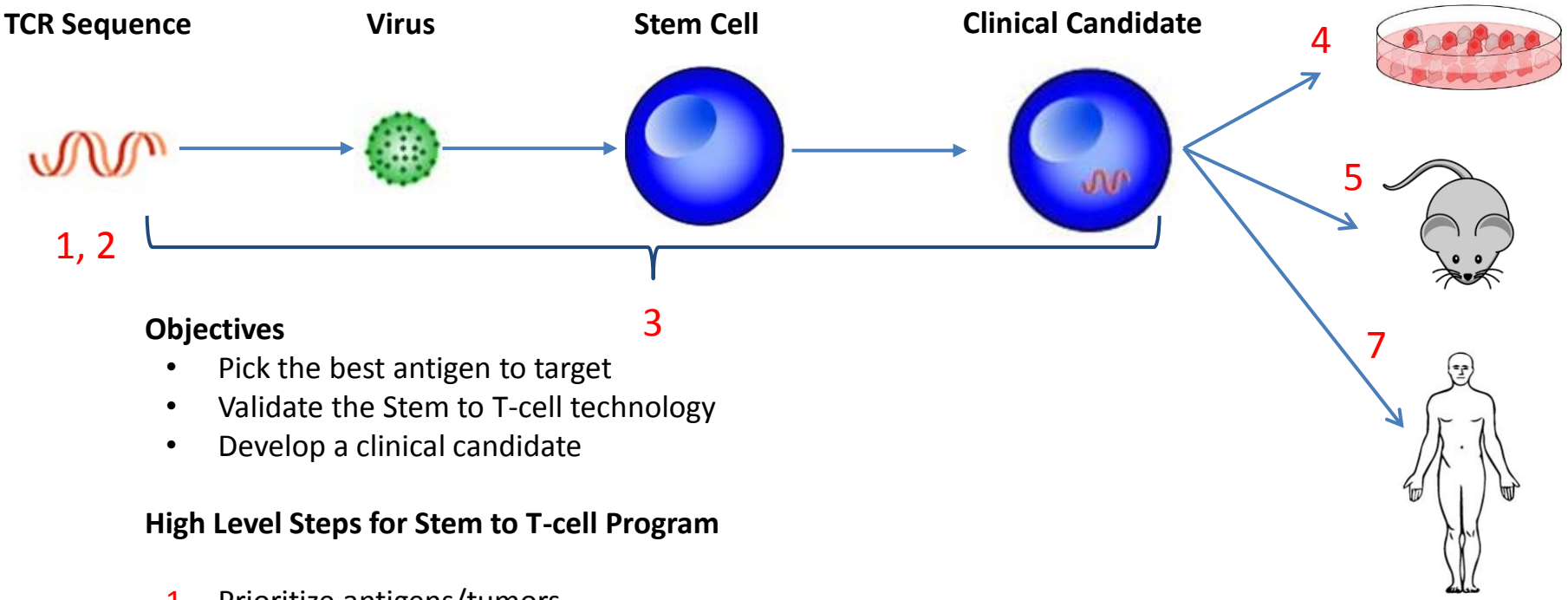
DC-based Immunotherapy Development Pipeline

Program	Description	Status
ICT-121	• HLA-A2 restricted immunotherapy for the treatment of recurrent glioblastoma • 1 antigen – 2 variants of CD133	• Enrolling phase 1 • 20 patients to be treated at 6 US sites • Enrollment continuing; update in 2016
ICT-140	• HLA-A2 restricted immunotherapy for the treatment of ovarian cancer • 7 antigens	• IND and protocol for phase 1/2 trial allowed by FDA • 6 sites in the US identified • Program start awaiting partnership or other financing

Novel Stem-to-T-Cell Technology In-Licensed from David Baltimore's Lab at Caltech



Overview of Stem Cell Program Current Thinking



Objectives

- Pick the best antigen to target
- Validate the Stem to T-cell technology
- Develop a clinical candidate

High Level Steps for Stem to T-cell Program

1. Prioritize antigens/tumors
2. License existing TCR and/or commence discovery research program – sponsored research at MD Anderson announced and underway
3. Develop process to create product and file for patents as able
4. Commence human cell line work to show killing of tumor cells
5. Commence animal model work to validate system
6. Understand and complete FDA requirements for IND
7. File IND and commence human testing

Potential Advantages of IMUC's Stem-to-T-Cell Technology

Technology	Description	Assessment
CAR-T	• Introduce an antibody-like receptor via virus into T-cells isolated from patient to create therapy • Requires targeting of surface antigens	• Restricts targets to surface antigens • HLA independent • "Cytokine storm" needs to be managed as does off-target tox
Engineered T-cell	• Introduce an antigen-specific TCR via virus into T-cells isolated from the patient to create a therapy	• Broad range of potential targets • Requires TCR discovery • HLA dependent • May require *ex vivo* cell expansion • Therapies may have a time-limited effect
TILs	• Isolate tumor infiltrating lymphocytes from the patient's tumor and expand *ex vivo* to make the therapy	• Customized to patient's tumor • Requires significant *ex vivo* cell expansion • Therapies may have a time-limited effect
IMUC Stem-to-T-cell	• Isolate hematopoietic stem cells, use virus to deliver TCR, and return to patient as therapy	• Broad range of potential targets • Requires TCR discovery • HLA dependent • Does not require *ex vivo* expansion • Stem cells produce constant supply of T-cells so therapy is robust over time • Potentially lower COGS

Anticipated Program Milestones

	2015	2016	2017	2018	2019
ICT-121	• Continue phase 1 enrollment	• Program update			
Stem Cells	• Commence research program			• File IND	
ICT-107	• Screen first patient in phase 3	• Treat first patient in phase 3	• Complete enrollment	• First interim result • Second interim result	

ICT-107 Accomplishments on Track for 2015

- Sign cooperative group agreement(s)
- Agreement on SPA reached FDA August 2015
- File CTA in Canada; CTA and IMPD in the EU
- Tech transfer manufacturing to Europe
- Initiate trial sites in the US
- Initiate trial sites in the EU
- Update the phase 2 results and present at SNO

Current Balance Sheet – As of 9/30/15

Cash	$24.4 million
2015 burn (9 months)	$13.2 million
Outstanding debt	None
Shares outstanding	90.3 million
Warrants outstanding	28.2 million
Options outstanding	10.7 million with an average exercise price of $1.19

The $19.9 million CIRM award will be received by the Company over the duration of the trial as specified milestones are achieved

ImmunoCellular is a Compelling Investment Opportunity

- Our mission is to build a leading cancer immunotherapy company:
  - Broad technology platform, pipeline of differentiated therapies
  - Changing cancer treatment paradigms; improving outcomes for patients with intractable lethal cancers that represent high unmet medical needs

- We aim to create value for all our stakeholders
  - Patients and families
  - Shareholders and partners
  - Employees
  - Medical and scientific community

- We are accomplished, driven, focused and committed to achieving our goals and having a beneficial impact on human health