



Company Overview

NASDAQ: SLS

January 2022

This presentation contains forward-looking statements. Such forward-looking statements can be identified by the use of the words “expect,” “believe,” “will,” “anticipate,” “estimate,” “plan,” “project” and other words of similar import. The forward-looking statements in this presentation include, but are not limited to, statements related to the potential of our clinical candidates as therapeutic options for various cancers, the general development of the Company’s product candidate pipeline and anticipated milestone dates, and the effects of the Company’s approach to cancer treatment. These forward-looking statements are based on current plans, objectives, estimates, expectations and intentions, and inherently involve significant risks and uncertainties. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties, which include, without limitation, risks and uncertainties associated with the COVID-19 pandemic and its impact on the Company’s clinical plans and business strategy, immune-oncology product development and clinical success thereof, the uncertainty of regulatory approval, and other risks and uncertainties affecting SELLAS and its development programs. These risks and uncertainties are described more fully under the caption “Risk Factors” in the in SELLAS’ Annual Report on Form 10-K filed on March 23, 2021 and in its other filings with the Securities and Exchange Commission. Other risks and uncertainties of which SELLAS is not currently aware may also affect SELLAS’ forward-looking statements. The forward-looking statements herein are made only as of the date hereof. SELLAS undertakes no obligation to update or supplement any forward-looking statements to reflect actual results, new information, future events, changes in its expectations or other circumstances that exist after the date as of which the forward-looking statements were made.

SELLAS is a late-stage clinical biopharmaceutical company focused on the development of **novel cancer immunotherapies** for a broad range of cancer indications.

- **Lead product - galinpepimut-S (GPS):** highly novel and engineered immunotherapy targeting the **Wilms Tumor 1 (WT1) antigen**
 - Discovered and licensed from **Memorial Sloan Kettering Cancer Center**
- **GPS: Ongoing Phase 3 pivotal trial (REGAL study)** for acute myeloid leukemia (AML) in patients achieving second complete remission (CR2)
- **GPS: Phase 1/2 combination studies with anti-PD1 drugs** - collaboration agreement with Merck (KEYTRUDA®) in various tumor types and an IST study with Memorial Sloan Kettering Cancer Center and Bristol Myers Squibb (OPDIVO®) in metastatic pleural mesothelioma
- **Out-licensing opportunity with second product candidate, neli pepimut-S (NPS):** HER2-directed cancer immunotherapy with potential for the treatment of patients in the maintenance setting with triple negative breast cancer



✓ Pivotal Phase 3 Trial Underway in CR2 AML Patients (REGAL study)

- Monotherapy **AML maintenance** after Second Complete Remission (CR2)
- Interim read-out expected in **second half of 2022** (as long as there are no COVID-related delays)
- Potential **launch first half of 2024**
- **Orphan Drug Designation** (US and EU) and **Fast Track status**
- Phase 2 results:
 - GPS reaching **21.0** months median Overall Survival vs. **5.4** months standard of care ($p < 0.02$).



✓ Validated Wilms Tumor 1 (WT1) Target

- #1 ranked cancer antigen by the NCI
- GPS targets tumors that overexpress the **WT1 protein**



✓ Innovative, First-in-Class Technology Licensed from Memorial Sloan Kettering

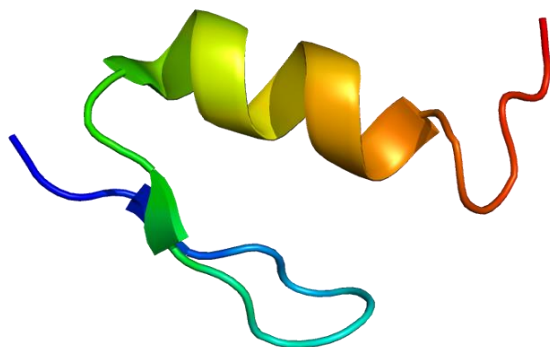
- Highly engineered immunotherapy designed to boost immunogenicity and break tolerance
- Applicable to the majority (**90%**) of human **HLA types**
- Activation of **both CD4+** (memory) and **CD8+** (tumor killing) cells
- Sustained remission



✓ Broad Applicability in I/O Treatment Setting and Strong IP Position

- Potential to be used as **monotherapy or in combination** with other I/O agents in multiple **solid and hematological** tumor types; two studies of GPS in combination with PD1 inhibitors ongoing
- Composition of matter patent to at least **2033**

WT1: Nuclear Transcription Factor with Oncogenic Properties



Wilms Tumor 1 Protein

Leukemia

Review | Published: 15 March 2007

A tumor suppressor and oncogene: the WT1 story

L Yang, Y Han, F

Leukemia 21, 8

SCIENTIFIC REPORTS

Article | Open Access | Published: 09 March 2015

Wilms' tumor 1 (WT1) expression and prognosis in solid cancer patients: a systematic review and meta-analysis

Xiao-wei Qi, Fan Zhang, Hong Wu, Jun-lan Liu, Bei-ge Zong, Chuan Xu & Jun Jiang

Scientific Reports 5, Article number: 8924 (2015) | Cite this article

Top Ranked Cancer Antigen by the **National Cancer Institute (NCI)**¹

Potential to treat **20 or more** cancer types creates a **large potential market** for WT1 targeting therapies

Broadly detectable in AML, where it is densely and **almost universally expressed (97%)**. It is also **expressed in multiple solid tumors and cancer stem cells**

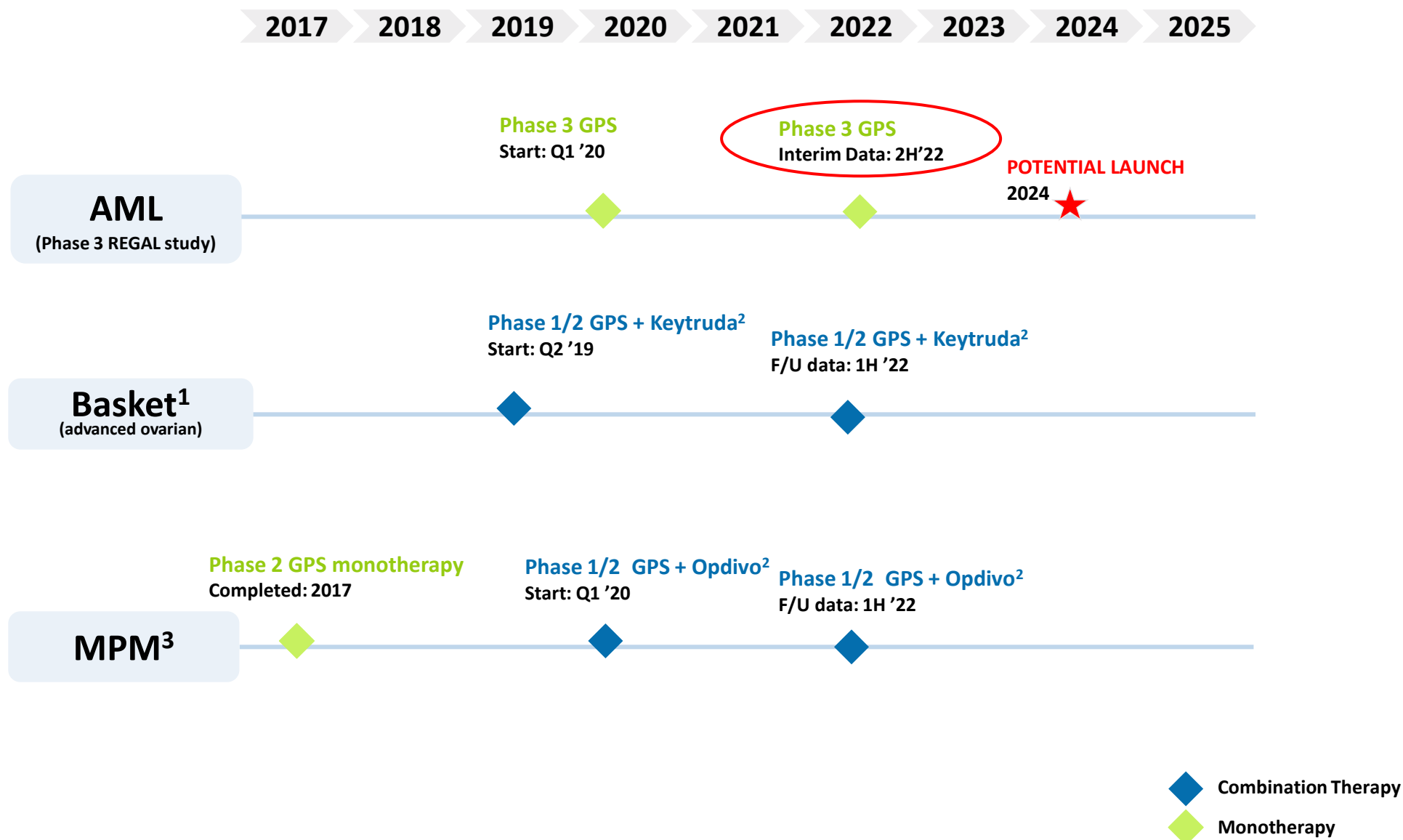
Highly expressed and presented in cancer cells, enabling recognition and killing by specifically immunized T-cells

Intracellular oncofetal antigen, WT1 **not found appreciably in adult tissues**, which **lowers potential off-target toxicity**

Does **not** down-regulate or become mutated frequently

Sources: Gaiger, Leukemia. 1998; 2. Dao & Scheinberg, Best Pract Res Clin Haematol. 2008; 3. Nishida & Sugiyama, Methods Mol Biol. 2016; NED: no evidence of disease
Notes: 1. 'The Prioritization of Cancer Antigens: A National Cancer Institute Pilot Project for the Acceleration of Translational Research' Cheever et al; Clin Cancer Res., 2009.

Near-Term Value Creation Milestones for Pipeline



Notes: 1. Multiple solid and liquid tumor types with prioritization of ovarian cancer (second or third line). 2. Merck and Bristol-Myers Squibb supply study drugs but do not have any rights to GPS 3. Malignant Pleural Mesothelioma (MPM).

GPS – Mechanism of Action



*‘Heteroclitic’ peptides are engineered to have an artificially introduced single point amino acid (AA) sequence mutation:
i.) peptide binds with a higher affinity, ii.) breaks tolerance to the native sequence and iii.) stimulates stronger T cell response*

GPS

“Heteroclitic” multivalent peptide chains addressing 25 WT1 epitopes

- 4 peptides of variable lengths (9-22 amino acids)
- 2 native sequences
- 2 synthetic sequences with single AA mutations

Peptide sequences (position)	
WT1-A1: *YMFPNAPYL (126–134)	9-mer
427 long: RSDLVRRHHNMHQRNMTKL (427–445)	19-mer
331 long: PGCNKRYFKLSHLQMHSRKHTG (331–352)	22-mer
122A1 long: SGQA*YMFPNAPYLPSCLES (122–140)	19-mer

Heteroclitic peptides increase immune response

- Synthetic sequence binds with higher strength (affinity) to the HLA molecules, generating stronger immune response
- Increases chance of **generating clonal T-cell population with recognition of at least one peptide**, and a clinical response against the tumor
- **Breaks tolerance to the native tumor sequence**
- Generates a response against the native sequence found in the tumor cells
- Spurs **multi-epitope, broad cross-reactivity** along the full length of the WT1 protein

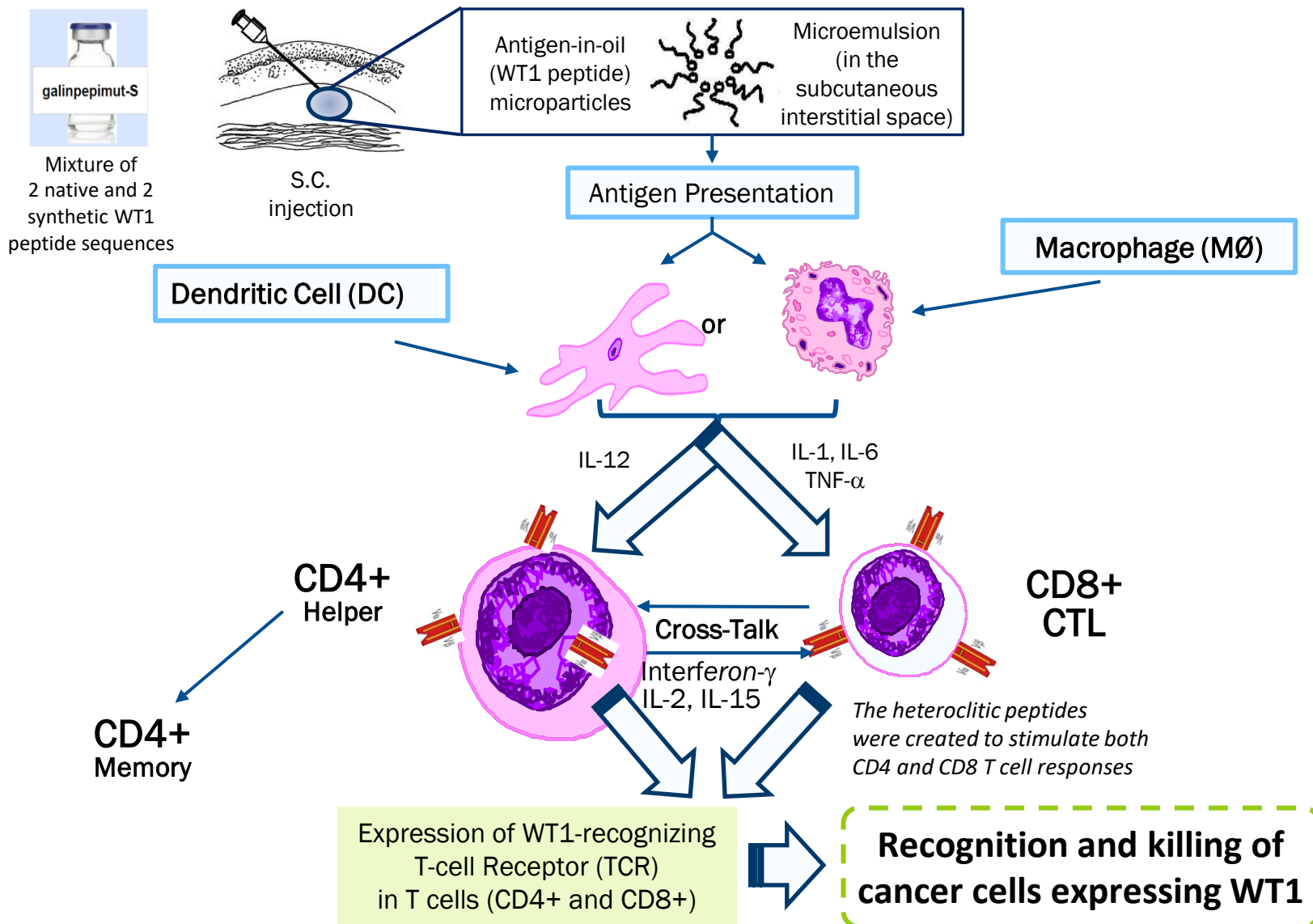
Production of both CD4 and CD8 WT1-specific activated cells

- Native sequences designed to activate CD4⁺
- Synthetic sequences designed to active CD4⁺ and CD8⁺

Specificity across multiple HLA types¹

- Broad coverage of human HLA allelic variation
- Allows for ‘off the shelf’ subcutaneous injection use and simple manufacturing process (lyophilized formulation)

Mechanism of Action



Sources: Gomez-Nunez M, et al. LeukRes.2006;30:1293-8; Pinilla-Ibarz J, et al. Leukemia. 2006;20:2025-33; Schijns VE, et al. Curr. Protoc. Immunol. 2014;106:2.18.1-7.

GPS – Targeting AML



Compelling Survival Benefit Seen in AML Patients in CR2 1,2

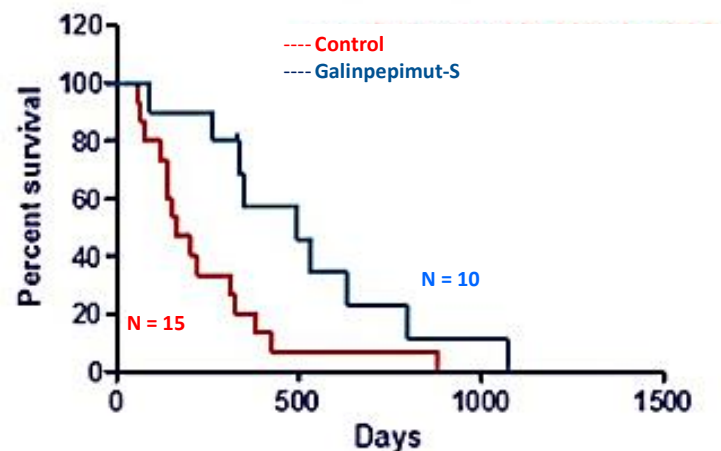
Completed Phase 2 Open-label Study in AML CR2 Patients at Moffitt Cancer Center (MCC)

Median Overall Survival (All Age Patients): GPS vs SOC*

21.0 months vs 5.4 months

p < 0.02

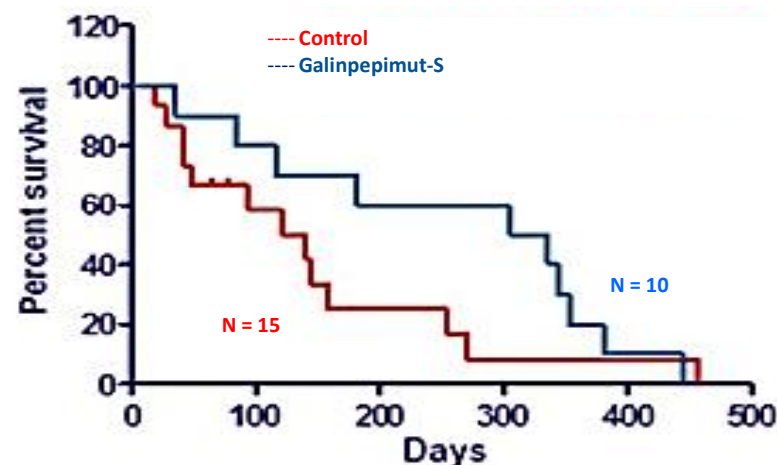
(A) OVERALL SURVIVAL



Relapse Free Survival (All Age Patients): GPS vs SOC*

10.5 months vs 4.3 months

(B) RELAPSE-FREE SURVIVAL



* Standard of Care

Phase 2 Open-label Clinical Study in AML CR1 Patients

Overall Survival (All Age Patients): GPS vs SOC

67.6 months vs 17.5 - 25 months

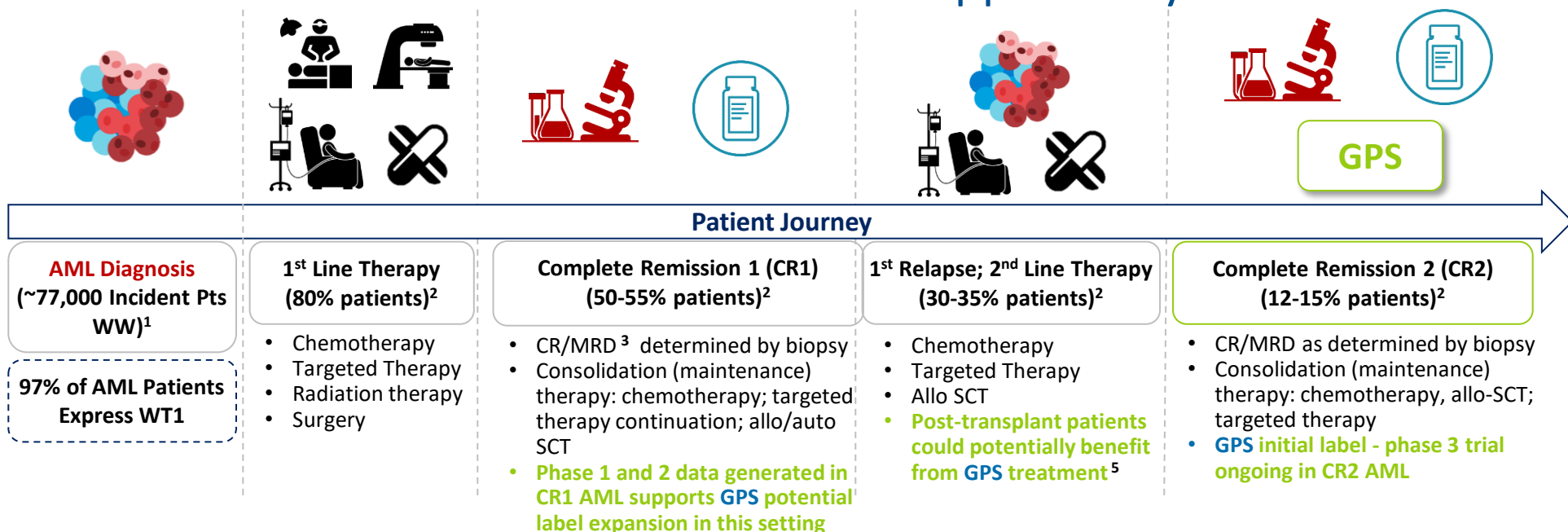
Overall Survival (>60 Years Patients): GPS vs SOC

35.5 months vs 9.5 - 15.8 months

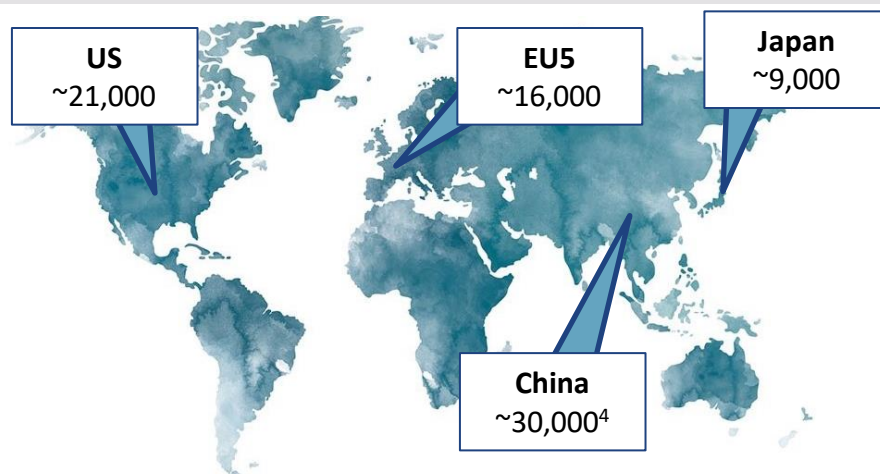
Key Points:

- Pre-specified primary endpoint of 3 year OS > 34% was met in 47% of patients. AML historical OS at 3 years is ~25%¹
- Phase 2 survival with GPS in elderly (>60 yr) AML patients in CR1 far exceeds that seen with historical comparators (statistically significant), even allogeneic stem cell transplant
- 88% of patients dosed with GPS had an antigen specific immune response to any of the 4 GPS peptides of either CD4+ or CD8+; 64% had a persistent, mainly CD4+ response at both early and late time points
- CD4+ responses seen across all HLA-Class II subtypes tested

Phase 3 Trial Underway in Niche AML CR2 Patient Population within Rare AML Disease – GPS Broad AML Applicability



Geographic Incident Adult AML Cases Annually¹

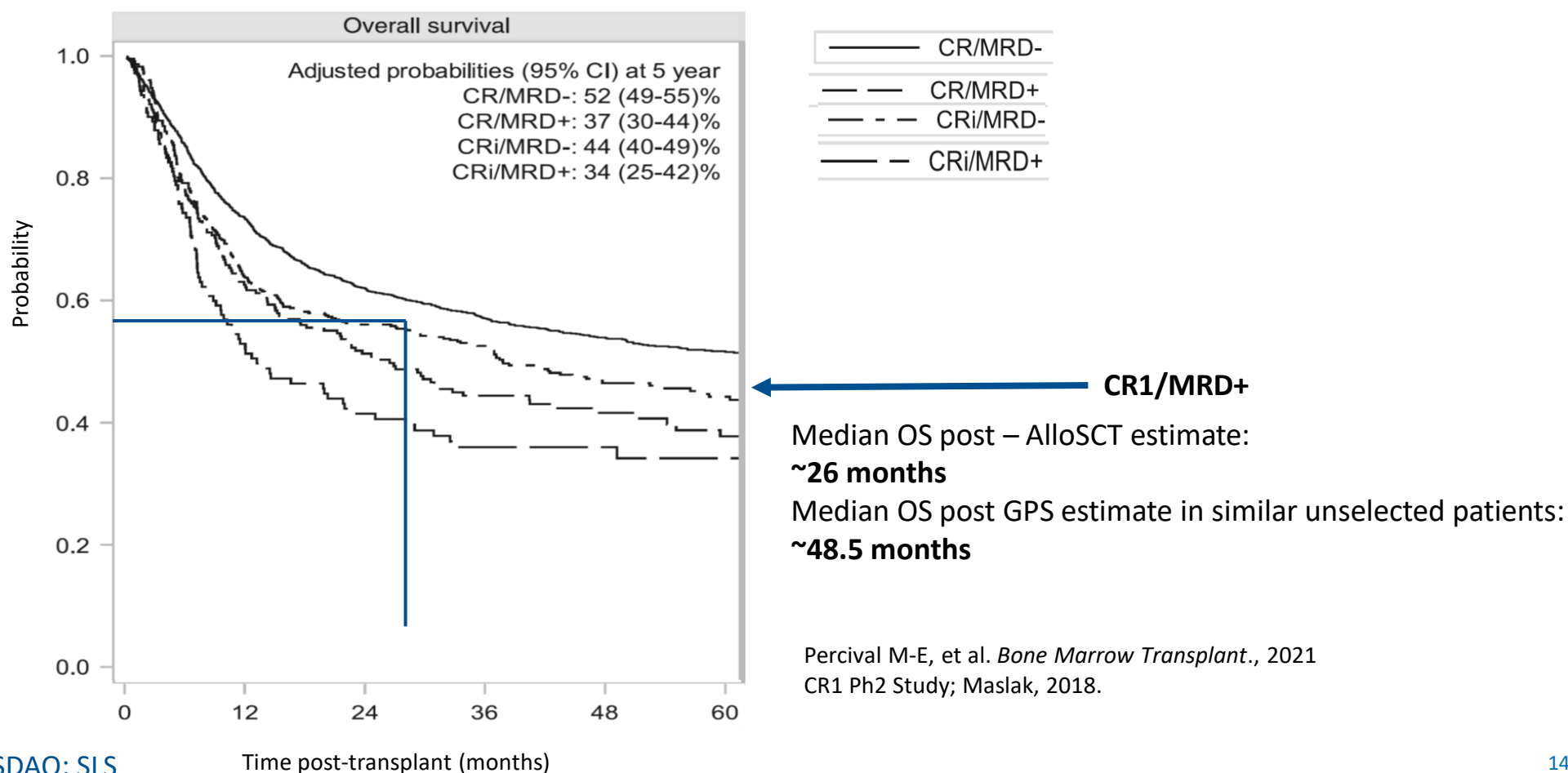


- **GPS** not only has potential for CR2 patients but could be equally important in the CR1 patient population
- Pool of addressable patients further enhanced by fact that CR1 patients who undergo bone marrow transplant (BMT) who are less likely to benefit from it (whom GPS could potentially significantly extend survival) - MRD positive patients – can be identified
- Further potential expansion: patients in complete remission with incomplete peripheral blood recovery (CRi); addition of GPS to any potential maintenance drugs

Notes: 1. Global Data forecasts for 2020 2. Patient segmentation incidence adapted from Kurosawa, S et al. (2010), Hematologica. 95(11): 1857 – 1864; MRD=minimal residual disease; 4. James Moore, Patientworthy.com, July 25, 2019; 5. Percival M-E, et al. Bone Marrow Transplant., 2021.

New Data Highlight GPS Opportunities in Bone Marrow Transplant (BMT) Settings

- BMTs cure approximately 50% of patients if they have no MRD and approximately 33% of patients with MRD
- Median OS for patients with MRD: approximately one year if they did not have complete peripheral blood recovery after the treatment and approximately two years if they had a complete peripheral blood recovery
- **In Phase 2 CR1 GPS study, patients had complete responses and were MRD positive but not eligible for transplant; median survival was 48.5 months even without transplant, approximately 2x longer than same category of patients who received transplant**



Design of Phase 3 Registration Enabling Study in CR2 AML Patients (REGAL)

Target Population and Inclusion Criteria

N = 116
Patients >18 years old

Stratification axes:

- CR2 vs CRp2 status
- Cytogenetics risk category
- Duration of CR1 (12 months)
- MRD status

CR2/CRp2 AML Patients post-2L therapy (excluding agents for targeted molecular aberrations)¹

Ineligible/unable to undergo imminent Allogeneic Stem Cell Transplant (ASCT)

Global Study: > 100 clinical sites

R
1:1

Treatment:

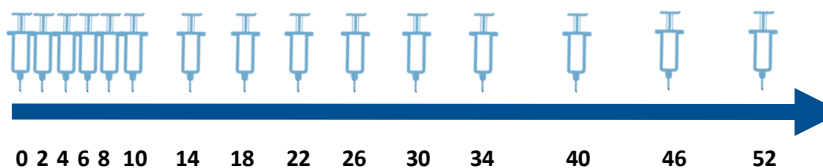
Open Label; Randomised Multi-center Phase 3 Trial

Endpoints and Interim Analysis

Cohort 1

GPS: 800 µg of peptide mixture; 200 µg of each peptide/dose

Administration Schedule: 1 year



Cohort 2

Best Available Therapy (BAT)

Clinician's choice of 4 regimens (Observation; HMAs and/or Ventoclax and/or Low-dose Ara-C

Primary Endpoint: Overall Survival

- At least **90% powered**
- Assumed Hazard Ratio (HR) of 0.52 based on a **median OS of 10.0 months (GPS) vs 5.4 months (BAT)**
- To declare statistical significance: either a **HR of <0.60 at interim analysis, or a HR of <0.675 at final analysis**

Interim Analysis: SAP provides for planned interim safety and futility analysis after first **80 events**



U.S. & Global Lead

Hagop Kantarjian, MD

Distinguished Professor
Head, Dept. of Leukemia
M.D. Anderson Cancer Center
Houston, Texas

Notes: 1. Excluding agents that should be continued in the maintenance setting after achievement of CR2 with usage of 2L regimens containing such agents (e.g. FLT3 inhibitors); CRp2: CR2 with incomplete platelet recovery, i.e., platelet count of $\geq 60 \times 10^9/L$ (as defined for this study); PB: peripheral blood; BM: bone marrow.

Steering and Data Monitoring Committee For Phase 3 REGAL Clinical Trial

Steering Committee	Position
Hagop Kantarjian, M.D.	Chair of the REGAL Steering Committee, Professor and Chair of the Department of Leukemia at The University of Texas MD Anderson Cancer Center, and Principal Investigator at MD Anderson for the multi-center Phase 3 REGAL study
Javier Pinilla-Ibarz, MD, PhD	Director of Immunotherapy for Malignant Hematology at the H. Lee Moffitt Cancer Center and member of the SELLAS Scientific Advisory Board
Moshe Yair Levy, M.D.	Director of Hematologic Malignancies at the Texas Oncology - Baylor Charles A. Sammons Cancer Center
Data Monitoring Committee	Position
Miguel-Angel Perales, M.D.	Chair of REGAL DMC. Chief, Adult Bone Marrow Transplant Service at Memorial Sloan Kettering Cancer Center (MSKCC)
Stephane de Botton, M.D.	Head of the Hematology Department at the Gustave Roussy Cancer Campus in Paris
Thomas Fleming, M.D.	Professor and former department chair of the University of Washington Department of Biostatistics, Member of the Fred Hutchinson Cancer Research Center, and former Director of the Statistical Center for HIV/AIDS Prevention Trial Network, NIAID

GPS – Beyond AML



GPS Monotherapy Has Shown Impressive Clinical Trial Results in MPM and MM

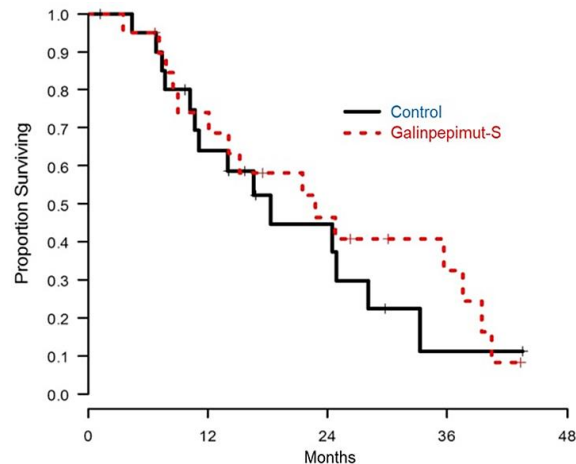
Blinded, Randomized Controlled Phase 2 in Metastatic Pleural Mesothelioma (MPM), After Surgery and 1L Therapy¹

Key Points:

- GPS **increased overall survival** vs. control group. Study n=41
- GPS induced both **CD8+ and CD4+ T-cell activation**, with frequencies of 66.7% and 50% respectively
- GPS was **well tolerated**; adverse events were mainly low grade reactions at the site of injection
- Successful End-of-Phase 2 meeting with FDA

Median Overall Survival (All Patients):GPS vs SOC

22.8 months vs 18.3 months



Galinpepimut-S → 22.8 mo (9.1 – 37.6)
Control → 18.3 mo (10.2 – 28)

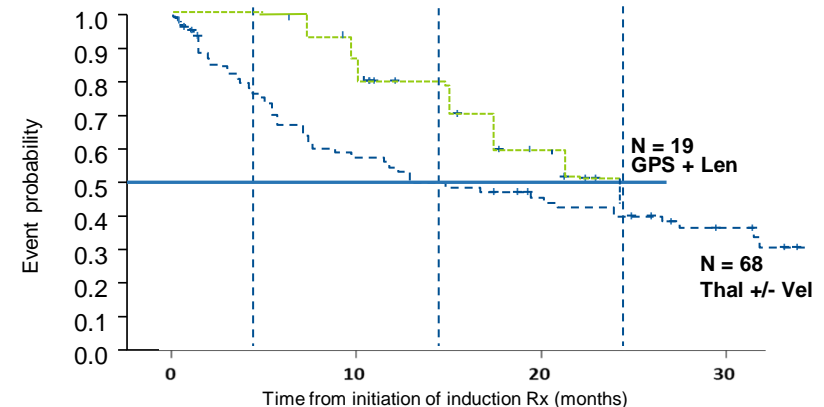
Open-label Phase 2 Study in Multiple Myeloma (MM) Patients, in Maintenance Setting with Lenalidomide after 1st Successful

Key Points:

- Inclusion criteria also mandated patients had baseline high risk cytogenetics and remained MRD positive after transplant
- GPS **increased progression free survival** vs. historical control (Thalidomide +/- Velcade maintenance therapy in same patient population as GPS treatment). Study n = 20
- **Progression free survival (PFS) rate at 12 months: 81%; PFS rate at 18 months: 62%; Overall survival (OS) at 18 months: 88%. Median OS not yet reached**

Median Progression Free Survival (All Age Patients):GPS vs SOC

23.6 months vs 14.0 months



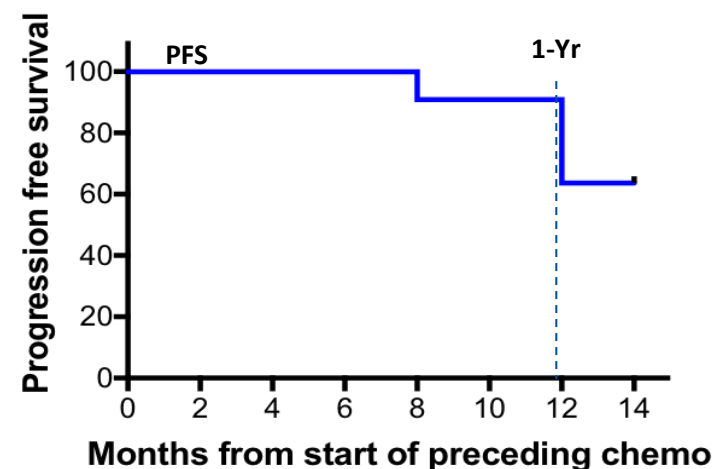
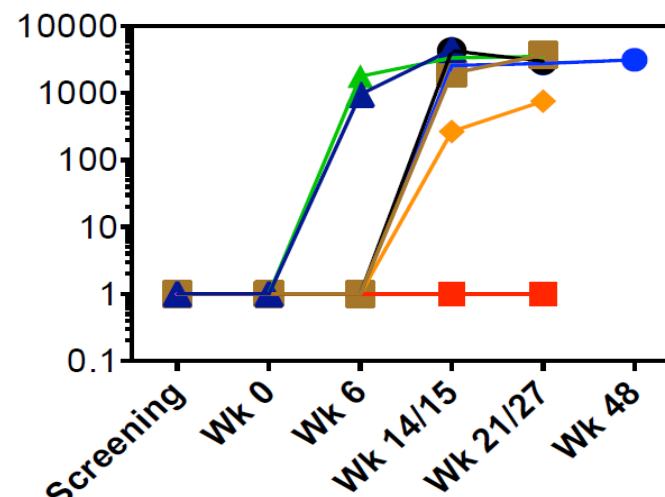
GPS Has Demonstrated Activity and Is Well Tolerated in Combination with Checkpoint Inhibitors in WT1 expressing Solid Tumors

Open-label Phase 1 GPS + Nivolumab in Minimum Residual Disease (MRD) Negative, WT1+ Ovarian Cancer Patients After 1st or 2nd Salvage Chemotherapy

Key Points:

- 1. Primary Endpoint met:** GPS + nivolumab was well tolerated in study (n=11). Most frequent treatment related adverse events (TRAEs): injection site reaction, joint pain and fatigue. None above Grade 1
- 2. Secondary Endpoint met:** WT1-specific IgG (against all 4 GPS peptides) observed in 86% of patients (wks 6 – 27). CD4⁺ and CD8⁺ T cell responses also observed (wks 6 – 15)
- 3. Exploratory Endpoint: Landmark 1-year PFS rate = 70%** in pts who received >1 dose of GPS + nivolumab (n=10). Historical PFS rates²⁻⁴ do not exceed 50% in this setting¹
- 4. Exploratory Endpoint: Landmark 2-year PFS rate = at least 30%** in pts who received >1 dose of GPS + nivolumab (n=10)⁵. Historical PFS rates²⁻⁴ range between 3-10% in this setting⁵

WT1-specific IgG titers over time



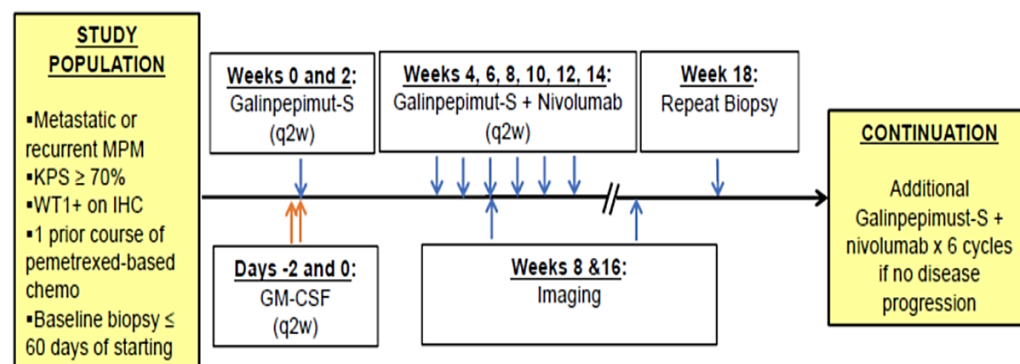
Two Ongoing Trials of GPS in Combination With Checkpoint Inhibitors

Open-label Phase 2a Basket Study GPS + Pembrolizumab

Key Points:

- Inclusion of patients 18 years or older (n=90) with any of 5 different tumor types treated concurrently with **pembrolizumab and GPS**. WT1 expression determined by immunohistochemistry with advanced measurable disease at entry
- Current **prioritization on ovarian (second or third line)** arm of trial
- **Primary endpoint:** Safety, RECIST (ORR) in solid tumors, morphological CR in AML. Secondary Endpoint: Duration of Response
- **Exploratory endpoints:** PFS, OS, ORR, % MRD negative, immune response and pembrolizumab PD correlates
- **Interim data as of June 30, 2021** shows disease control rate of 63.6% with median follow-up of 15.4 weeks; all patients alive at time of median follow-up; immune response data showed significant induction of WT1-specific T-cell immune response.

Open-label Phase 1 Investigator Sponsored Study (IST) of GPS + Nivolumab in relapsed/refractory MPM post 1L SOC Therapy (Pemetrexed) at MSKCC



- Interim Data (as of June 24, 2021) shows median overall survival of 35.4 weeks in patients treated with combination therapy for at least one month; median overall survival in relapsed/refractory patients with standard of care is approximately 28 weeks.

Broad Patent Coverage on Composition of GPS and Combination with Check-Point Inhibitors

Patents on each of the 4 GPS peptides and their use:

- US: Coverage to 2033 with potential 5 years extension, with 14 years max term post approval
- Europe: Coverage to 2027 with potential 5 years extension, in individual countries
- Australia and Canada: Coverage to 2026 with potential 2 years extension
- China: No patent coverage

Patents on GPS when used with new WT1 peptides ("GPS-Plus") having expanded haplotype for Asian populations

- US: Coverage to 2034 with potential 5 years extension, with 14 years max term post approval
- Europe: application allowed; will expire 2034 with potential 5 years extension, in individual countries
- China, Australia, Japan: Coverage to at least 2034

Patent application covering 7-peptide WT-1 immunotherapy composition and methods of use

- US: provisional application filed April 2019
- International (PCT) application filed April 2020 which will allow for filing in 150+ member states including China, with potential coverage to at least 2040

Patent and patent applications filed on combination with CPIs:

- US: patent granted June 15, 2021; coverage to 2036 with potential 5 years extension, with 14 years max term post approval
- Europe (application pending): Coverage to 2036 with potential 5 years extension, in individual countries
- China (application pending): Coverage to 2036 with potential 5 years extension
- Japan, Korea, Australia, Canada and Hong Kong (applications pending): Coverage to 2036

GPS – Development and Commercialization in Greater China: License Agreement with 3D Medicines



Exclusive License Granted to 3D Medicines in December 2020:

- Sublicensable, royalty-bearing license to develop, manufacture and commercialize GPS and heptavalent GPS (GPS-Plus)
- All therapeutic and diagnostic uses
- Territory: mainland China, Hong Kong, Macau and Taiwan (Greater China)

Financial Terms:

- Upfront cash payment of \$7.5 million upon entry of agreement
- Additional potential development, regulatory and commercial milestones totaling up to \$194.5 million
 - \$2 million achieved and received in 1H'21 relating to technology transfer
- Tiered royalties based upon percentage of annual net sales of licensed products (GPS) in the Greater China territory ranging from high single to low double digits

NPS: PHASE 3 READY ASSET



- NPS contains immunodominant peptide derived from the extracellular region of HER2 protein
 - Administered as intradermal injection
- Target indication: in combination with trastuzumab for triple negative breast cancer (TNBC) patients in the adjuvant setting to prevent recurrence
 - Patients who are hormone receptor-negative and HER2 1+/2+ by IHC
 - 30% of HER2 1+/2+ breast cancer patients
 - 15% of all breast cancer patients
 - **No FDA-approved targeted therapies for this indication**
- Phase 2b data showed clinically and statistically significant improvement in disease-free survival rate for TNBC cohort at 24 months
 - **Clinically meaningful and statistically significant difference in triple-negative breast cancer (TNBC) cohort** (n= 98) with a HR of 0.26 (p=0.013) in favor of NPS + Herceptin combination
 - Landmark analysis of DFS rates at 24-mo: **75.2% reduction in relative risk of recurrence or death** (active vs. control arm)
 - **72.5% relative reduction in the number of clinically detectable relapses** (p=0.004; active vs. control arm)
 - Phase 3 registration-enabling study design finalized
- **Currently focused on business development efforts to maximize value through an out-license of the program**

CORPORATE



Experienced Management Team and Board of Directors

Management Team	Position	Prior Experience/Affiliations
	Angelos Stergiou, M.D., ScD h.c.	President, CEO & Board Director     
	Dragan Cicic, M.D.	SVP, Clinical Development  
	Barbara A. Wood	EVP, General Counsel & Corporate Secretary  
	John T. Burns, CPA	SVP, Finance, and Controller and Chief Accounting Officer  
Board of Directors ¹	Position	Prior Experience/Affiliations
	Jane Wasman	Board Chair, Nominating and Governance Committee Chair  
	John Varian	Audit Committee Chair   
	Robert Van Nostrand	Compensation Committee Chair    
	Dr. David Scheinberg	Science Committee Chair  

Scientific Advisory Board – World Renowned Experts in Immunotherapy And Oncology

Name	Position
 Jeffrey Weber, M.D., Ph.D. - Chair	Deputy Director of the Perlmutter Cancer Center, Co-director of the Melanoma Research Program at the New York University (NYU)-Langone Cancer Center
 Jedd D. Wolchok, M.D., Ph.D.	Chief, Melanoma & Immunotherapeutics Service, Memorial Sloan Kettering Cancer Center (MSKCC)
 Alexander M.M. Eggermont, M.D.	Chief Scientific Officer, Princess Maxima Center for Pediatric Oncology, Utrecht, NL Former Director General, Institut Gustave-Roussy Cancer Campus - Grand Paris, Villejuif, FR
 Larry W. Kwak, M.D., Ph.D.	Vice President and Deputy Director of the City of Hope Comprehensive Cancer Center; Associate Director Cancer Center Translational Research & Developmental Therapeutics for the City of Hope National Medical Center
 Javier Pinilla-Ibarz, M.D.	Director of Immunotherapy for Malignant Hematology at the H. Lee Moffitt Cancer Center
 Sattva Neelapu, M.D., Ph.D.	Professor and Deputy Department Chair at the Department of Lymphoma and Myeloma, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center
 Guenther Koehne, M.D., Ph.D.	Chief, Bone Marrow Transplantation and Hematologic Oncology, Miami Cancer Institute

✓ **Significant milestones** for GPS expected through 2022

- Phase 3 REGAL trial for AML CR2 patients
 - Interim data expected 2H 2022 (as long as there are no COVID-related delays)
- Phase 1/2 basket study in five additional indications in combination with PD1 inhibitor
 - Additional interim data expected early 2022
- Phase 1 study in MPM in combination with PD1 inhibitor
 - Additional interim data expected early 2022

✓ **GPS: Targets WT1, the #1 immunotherapy target** of National Cancer Institute

- Potentially applicable to >20 cancer types
- Orphan designation and fast track status

✓ **GPS: a sophisticated, highly differentiated immunotherapeutic**

- 130+ patients treated in trials to date
- Good tolerability, consistent and notable signals of clinical benefit
- Heteroclitic peptides increase immune response
- Production of both CD4 and CD8 WT1-specific activated cells



Thank You!

For additional information, please contact:

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