

IDEAYA Biosciences, Inc. Reports First Quarter 2021 Financial Results and Provides Business Update

- Completed enrollment of initial dose escalation cohort of the Phase 1 clinical trial evaluating IDE397, a potential best-in-class MAT2A inhibitor for MTAP-deletion patients
- Demonstrated IDE397 single-agent preclinical activity in a 40-plus MTAP-deletion PDX study across major solid tumor types, including >60% TGI in 11 of 13 NSCLC PDX models, and tumor regressions in 2 of 4 NSCLC squamous PDX models, including a complete response
- Targeting development candidate nomination for potential first-in-class PARG and Pol Theta Synthetic Lethality programs in 2021
- Targeting FDA regulatory guidance in second half of 2021 based on preliminary darovasertib (IDE196) monotherapy overall survival data (OS) of 57% 1-year OS and median OS of 13.2 months in predominantly 2L / 3L+ MUM patients, where historical 1-year OS and median OS is reported at 37% and approximately 7 months, respectively, in a similar patient population
- Reported early partial responses of darovasertib plus binimetinib combination evaluated in Phase 1/2 clinical trial in predominantly 2L / 3L+ MUM patients
- Observed early clinical efficacy in first cohort of darovasertib plus crizotinib combination with tumor reduction in 2 of 2 evaluable MUM patients, including a partial response in a 3L patient with a 54% tumor reduction who is awaiting a confirmatory scan
- Initiated darovasertib plus crizotinib combination Phase 1/2 dose expansion based on early clinical activity observed in first cohort; additional dose exploration ongoing
- Targeting clinical data update for darovasertib combination(s) in the second half of 2021
- Strong balance sheet of ~\$325 million cash, cash equivalents and marketable securities is anticipated to fund planned operations into 2024

SOUTH SAN FRANCISCO, Calif., May 10, 2021 /PRNewswire/ -- IDEAYA Biosciences, Inc. (Nasdaq:IDYA), a synthetic lethality focused precision medicine oncology company committed to the discovery and development of targeted therapeutics, provided a business update and announced financial results for the first quarter ended March 31, 2021.

"We are excited to advance IDE397, a potential best-in-class MAT2A inhibitor, in the Phase 1 dose escalation for evaluation in patients with MTAP deletion tumors, including in non-small cell lung cancer (NSCLC). We are also continuing to invest in our preclinical synthetic lethality programs, including our PARG and Pol Theta programs for patients with HRD tumors, where we are targeting a development candidate for both programs in 2021," said Yujiro S. Hata, Chief Executive Officer and President of IDEAYA Biosciences.

"We are excited by the preliminary darovasertib monotherapy overall survival data in MUM and look forward to receiving FDA regulatory guidance based on the data in the second half of 2021. We are also executing on our darovasertib clinical combination strategy and are encouraged by the early partial responses observed in the combination arms, including now in the crizotinib combination. Importantly, the 54% tumor reduction by RECIST 1.1 observed in a patient treated with the darovasertib and crizotinib combination is the deepest partial response we have seen to date in the darovasertib Phase 1/2 clinical trial," said Matthew Maurer, M.D., Vice President, Head of Clinical Oncology and Medical Affairs, IDEAYA Biosciences.

Program Updates

Key highlights for IDEAYA's pipeline programs include:

IDE397 (MAT2A)

IDEAYA is evaluating IDE397, a potent and selective small molecule inhibitor targeting methionine

adenosyltransferase 2a (MAT2A), in patients having solid tumors with methylthioadenosine phosphorylase (MTAP) deletion, a patient population estimated to represent approximately 15% of solid tumors. IDEAYA is leading early clinical development of IDE397. Subject to exercise of its option, GlaxoSmithKline (GSK) will lead later stage global clinical development. Highlights:

- Initiated a Phase 1 clinical trial designated as IDE397-001 (ClinicalTrials.gov Identifier: NCT04794699) to evaluate IDE397 under an investigational new drug application
- Completed enrollment into an initial dose escalation cohort of the Phase 1 clinical trial
- Clinical development plans for IDE397 include a dose escalation portion of the Phase 1 clinical trial in which IDEAYA is enrolling patients having solid tumors with MTAP gene deletion. Patients are being identified by next generation sequencing (NGS) or by MTAP immunohistochemistry (IHC) assay with confirmatory NGS
- Subject to satisfactory completion of the dose escalation portion of the Phase 1 clinical trial, IDEAYA plans to enroll MTAP deletion patients into expansion arms in NSCLC and potentially in other solid tumor indications such as esophageal, gastric, bladder, head and neck, or pancreatic cancers
- Planning to obtain patient biopsies from the dose escalation and expansion portions of the clinical trial for translational research, including evaluation of certain pharmacodynamic, or PD, biomarkers, such as peripheral S-adenosyl methionine (SAM), tumor SAM and tumor symmetric dimethylarginine (SDMA)
- Program objective is to obtain preliminary clinical PD data from the dose-escalation portion of the IDE397 monotherapy Phase 1 clinical trial in the second half of 2021
- Demonstrated preclinical efficacy of monotherapy IDE397 in a study of over forty solid tumor patient derived xenograft (PDX) models with homozygous MTAP deletions across a range of solid tumor types, including NSCLC, esophageal, gastric, bladder, head and neck, and pancreatic cancers; study data was reported at AACR 2021 and showed:
 - tumor regressions, with >100% tumor growth inhibition, or TGI, in multiple PDX models across multiple solid tumor types, including in NSCLC as well as in bladder and gastric cancer models
 - >75% TGI in approximately 50% of models and across major solid tumor types
 - >60% TGI in approximately 75% of models and across major solid tumor types
 - dose-dependent modulation of PD biomarkers, including SDMA and SAM
- Observed single-agent IDE397 preclinical activity in NSCLC PDX models, demonstrating >60% TGI in 11 independent PDX models out of 13 models evaluated in the MTAP-deletion PDX panel study, including in 7 of 9 NSCLC adenocarcinoma PDX models, and in 4 of 4 NSCLC squamous carcinoma PDX models evaluated, and demonstrating tumor regressions in 2 of 4 NSCLC squamous PDX models, including one complete response
- Showed correlation of *in vivo* efficacy with PD modulation of tumor SDMA and tumor SAM in a study evaluating IDE397 in an MTAP-deletion NSCLC CDX model
- Reported preclinical analyses of genomic and metabolic effects of pharmacological inhibition of MAT2A in an isogenic cell pair and of proliferation effects in a panel of MTAP wild type and MTAP-deleted cell lines at AACR 2021

- Observed in vivo efficacy of IDE397 in combination with a taxane, showing enhanced TGI in a pancreatic cancer PDX model, and separately in combination with a PRMT inhibitor, showing enhanced TGI in an HCT116 MTAP-null CDX model

PARG

IDEAYA is advancing preclinical research for an inhibitor of poly (ADP-ribose) glycohydrolase (PARG) in patients having tumors with a defined biomarker based on genetic mutations and/or molecular signature. PARG is a novel target in the same clinically validated biological pathway as poly (ADP-ribose) polymerase (PARP). IDEAYA owns or controls all commercial rights in its PARG program. Highlights:

- Identified a novel and proprietary HRD biomarker to guide patient selection, with validation in vitro and in vivo in CDX models across multiple solid tumor indications
- Demonstrated PARGi dose-dependent in vivo efficacy as monotherapy with tumor regression or stasis in ovarian, gastric and breast cancer CDX models
- Observed in vivo efficacy with enhanced TGI or tumor regressions relative to niraparib, a PARPi, in multiple CDX models, including in a niraparib-resistant CDX model
- Showed tumor regressions in multiple breast cancer PDX models with defined genetic and subtyping profiles
- Reported preclinical data at AACR 2021, including pharmacological inhibition of PARG in a panel of homologous recombination deficient cell lines and in CDX and PDX models
- Subject to further preclinical studies, IDEAYA is targeting to identify a PARG inhibitor development candidate in 2021

Pol Theta

IDEAYA's DNA Polymerase Theta, (Pol Theta) program targets tumors with BRCA or other homologous recombination deficiency, or HRD, mutations. IDEAYA and GSK are collaborating on ongoing preclinical research, including small molecules and protein degraders, and GSK will lead clinical development for the Pol Theta program. Highlights:

- Demonstrated *in vivo* efficacy with tumor regression in BRCA2 -/- xenograft model with IDEAYA Pol Theta inhibitor in combination with niraparib, a GSK PARP inhibitor; and
- Subject to further preclinical studies, IDEAYA is targeting selection of a Pol Theta inhibitor development candidate in 2021

Werner Helicase

IDEAYA is advancing preclinical research for an inhibitor targeting Werner Helicase for tumors with high microsatellite instability (MSI). IDEAYA and GSK are collaborating on ongoing preclinical research, and GSK will lead clinical development for the Werner Helicase program. Highlights:

- observed dose-dependent cellular viability effect and dose-dependent cellular PD response in multiple endogenous MSI high cell lines

- Demonstrated in vivo efficacy and PD response in relevant MSI high models

Other Synthetic Lethality Pipeline Programs

IDEAYA is advancing additional preclinical research programs to identify small molecule inhibitors for an MTAP-synthetic lethality target, as well as for multiple distinct DNA Damage Targets for patients with solid tumors characterized by a proprietary biomarker or a gene signature.

Darovasertib (IDE196)

IDEAYA continues to execute on its clinical trial strategy to evaluate darovasertib (IDE196), a potent and selective PKC inhibitor.

IDEAYA is evaluating darovasertib in metastatic uveal melanoma (MUM) as monotherapy and in combination therapies, including combinations of darovasertib / binimetinib and independently, darovasertib / crizotinib. The company is continuing to enroll MUM patients into each of these combination arms of the Phase 1/2 clinical trial, and it targeting to provide a clinical data update for the darovasertib combination(s) in the second half of 2021. Based on preliminary monotherapy clinical data in MUM and its mechanism of action, we anticipate darovasertib clinical activity independent of Human Leukocyte Antigen (HLA) status in GNAQ/11-mutation cancers.

The company is also evaluating darovasertib as monotherapy outside of MUM, with a focus in GNAQ/11-mutation skin melanoma.

Darovasertib Monotherapy

IDEAYA has completed enrollment into its ongoing Phase 1/2 clinical trial evaluating darovasertib as monotherapy in MUM patients. IDEAYA is targeting to receive FDA guidance in H2 2021 on potential regulatory path, based on the preliminary darovasertib monotherapy overall survival data in MUM. The company is continuing enrollment into its ongoing basket trial evaluating darovasertib as monotherapy in patients having non-MUM tumors harboring GNAQ or GNA11 activating mutations. The company's development strategy in the monotherapy non-MUM GNAQ/11 arm of the clinical trial is focused on skin melanoma. Highlights:

- Reported interim clinical data from Phase 1/2 clinical trial arm evaluating monotherapy darovasertib in predominantly second and third line (2L/3L) and heavily pre-treated out to seventh or eighth line (7L/8L) MUM patients. As of data and analyses cutoff on April 13, 2021 based on preliminary data from an unlocked database:
 - Enrolled an aggregate of 81 darovasertib monotherapy BID MUM patients across the IDEAYA and Novartis Phase 1/2 clinical trials, with 81 patients evaluable for safety and 75 patients evaluable for efficacy pursuant to RECIST 1.1 guidelines
 - Observed 57% 1-year overall survival (OS) with 95% confidence interval (44%, 69%), in predominantly 2L/3L and heavily pretreated to 7L/8L patients
 - Observed median OS of 13.2 months with 95% confidence interval (10.7 months, not reached), in predominantly 2L/3L and heavily pretreated to 7L/8L patients
 - Historical 37% 1-year OS and median OS of ~7 months have been reported in similar 2L/3L+ MUM

patient population (Rantala 2019)

- Observed tumor reduction in 61% (n=46) of 75 evaluable MUM patients pursuant to RECIST 1.1 guidelines, including 15 patients (20%) with >30% target lesion reduction, and one confirmed complete response
- Reported preliminary clinical data from Phase 1/2 clinical basket trial arm evaluating monotherapy darovasertib in skin melanoma patients. As of data and analyses cutoff of April 13, 2021 based on preliminary data from an unlocked database:
 - Enrolled 7 darovasertib monotherapy BID skin melanoma patients in the IDEAYA Phase 1/2 clinical trial, with 7 patients evaluable for safety and 5 patients evaluable for efficacy pursuant to RECIST 1.1 guidelines
 - Observed tumor reduction in 80% (n=4) of 5 evaluable skin melanoma patients pursuant to RECIST 1.1 guidelines, including one confirmed PR
- An aggregate of 88 patients were evaluable for safety across Phase 1/2 arms evaluating darovasertib in MUM and skin melanoma patients. As of the April 13, 2021 data and analyses cutoff, and based on preliminary data from an unlocked database, the overall safety profile of darovasertib monotherapy is consistent with prior experience and includes primarily common low grade but manageable GI and skin toxicities
- Preliminary clinical data from darovasertib monotherapy arm shows that darovasertib activity is independent of HLA status

Darovasertib / Binimetinib Combination Therapy

IDEAYA is continuing patient enrollment into the darovasertib / binimetinib combination arm of the Phase 1/2 clinical trial under the clinical trial collaboration and supply agreement with Pfizer. Highlights:

- Initiated dose expansion evaluating the darovasertib / binimetinib combination in MUM based on early clinical activity
- Amended the clinical trial collaboration and supply agreement with Pfizer to support target enrollment of approximately 40 patients in the darovasertib and binimetinib clinical combination arm
- Reported preliminary clinical data from Phase 1/2 clinical trial arm evaluating the darovasertib / binimetinib combination in MUM patients, predominantly as second line, third line (2L / 3L) or later lines of treatment. As of data and analyses cutoff of April 13, 2021 based on preliminary data from an unlocked database:
 - 24 MUM patients have enrolled in the darovasertib and binimetinib combination study and 14 of these patients were evaluable, including eight patients dosed in the Phase 1/2 dose expansion cohort of the combination study
 - Observed 22% (n=2) partial responses (PR), including one confirmed PR and one unconfirmed PR awaiting a confirmatory scan, of nine evaluable MUM patients with at least two post-baseline scans pursuant to RECIST 1.1 guidelines

- Observed tumor reduction in 79% (n=11) of 14 evaluable MUM patients with at least one post-baseline scan pursuant to RECIST1.1 guidelines
- Drug-related adverse events observed in the darovasertib and binimetinib combination arm in MUM, as of April 13, 2021 data and analyses cutoff based on preliminary data from an unlocked database, primarily include: serious adverse events of liver toxicity, nausea and vomiting, and syncope; and adverse events that occurred in greater than 10% of patients of nausea, vomiting, diarrhea, rash, edema, aminotransaminase, or AST increase, alanine aminotransferase, or ALT, increase and creatine phosphokinase increase

Darovasertib / Crizotinib Combination Therapy

IDEAYA is continuing patient enrollment into the darovasertib / crizotinib combination arm of the Phase 1/2 clinical trial under the clinical trial collaboration and supply agreement with Pfizer. Highlights:

- 6 MUM patients have enrolled in the darovasertib and crizotinib combination study and 2 of these patients were evaluable for response with one post-baseline scan
- Observed early clinical efficacy of the darovasertib and crizotinib combination in MUM. As of data and analyses cutoff on May 5, 2021 based on preliminary data from an unlocked database, these data showed:
 - tumor reduction in 2 of 2 evaluable patients in a first cohort
 - one unconfirmed partial response in a 3rd-line patient, with a 54% tumor reduction, which is the deepest response, as reflected by the largest percentage reduction in tumor size, reported in the darovasertib clinical trial to date; this patient is awaiting a confirmatory scan
- Drug-related adverse events observed in the darovasertib and crizotinib combination arm in MUM as of May 5, 2021, based on preliminary data from an unlocked database, primarily include: serious adverse events of syncope and hypotension, each of which resolved with patients continuing dosing; and adverse events that occurred in at least two of the six treated patients of nausea, diarrhea, vomiting, edema, decreased appetite, and syncope.
- Initiated dose expansion for a cohort of the Phase 1/2 darovasertib / crizotinib combination arm, with additional dose exploration ongoing
- Observed preclinical synergies between darovasertib and crizotinib in relevant cellular models under conditions simulating a tumor microenvironment in the liver, the site of approximately 90% of uveal melanoma metastases, as reported at AACR 2021
- Correlated cMET expression and activation to observed clinical response based on a retrospective analysis of human clinical biopsies from the Novartis darovasertib Phase 1 clinical trial, supporting cMET expression / activation as potential combination agent

General

IDEAYA continues to monitor Covid-19 and its potential impact on clinical trials and timing of clinical data results. Initiation of clinical trial sites, patient enrollment and ongoing monitoring of enrolled patients, including

obtaining patient computed tomography (CT) scans, may be impacted for IDEAYA clinical trials evaluating IDE397 and darovasertib; the specific impacts are currently uncertain.

Corporate Updates

IDEAYA's net losses were \$9.0 million and \$5.1 million for the three months ended March 31, 2021 and December 31, 2020, respectively. As of March 31, 2021, the company had an accumulated deficit of \$136.0 million.

As of March 31, 2021, IDEAYA had cash, cash equivalents and marketable securities of \$310.4 million. IDEAYA supplemented its first-quarter-end cash, cash equivalents and marketable securities with an additional \$14.6 million in aggregate gross proceeds received subsequent to quarter end from the sale and issuance of common stock at a weighted average sale price of \$22.99 per share under an at-the-market offering pursuant to the January 2021 Sales Agreement with Jefferies as sales agent.

IDEAYA believes that its cash, cash equivalents and marketable securities will be sufficient to fund our planned operations into 2024. These funds will support the company's efforts through potential achievement of multiple preclinical and clinical milestones across multiple programs.

Our updated corporate presentation is available on our website, at our Investor Relations page:

<https://ir.ideayabio.com/>.

Financial Results

As of March 31, 2021, IDEAYA had cash, cash equivalents and short-term marketable securities totaling \$310.4 million. This compared to cash, cash equivalents and short-term and long-term marketable securities of \$283.6 million at December 31, 2020. The increase was primarily due to \$41.8 million in net proceeds received through March 31, 2021 from issuance of common stock under at-the-market offerings pursuant to the August 2020 Sales Agreement and January 2021 Sales Agreement with Jefferies as sales agent offset by cash used in operations and purchases of property and equipment.

Collaboration revenue for the three months ended March 31, 2021 totaled \$7.2 million compared to \$10.6M for the three months ended December 31, 2020. Collaboration revenue was recognized for the performance obligations satisfied through March 31, 2021 under the GSK Collaboration Agreement.

Research and development (R&D) expenses for the three months ended March 31, 2021 totaled \$11.6 million compared to \$12.1 million for the three months ended December 31, 2020. The decrease was primarily due to a decrease in external clinical development expenses for IDE397 and darovasertib and a decrease in fees to CROs, CMOs and external consultants related to our lead product candidates, offset by an increase in R&D headcount costs.

General and administrative (G&A) expenses for the three months ended March 31, 2021 totaled \$4.8 million compared to \$3.8 million for the three months ended December 31, 2020. The increase was primarily due to an increase in G&A headcount costs, an increase in legal patent expense, and an increase in costs related to the

filing of our shelf registration statement on Form S-3 during the quarter.

The net loss for the three months ended March 31, 2021 was \$9.0 million compared to \$5.1 million for the three months ended December 31, 2020. Total stock compensation expense for the three months ended March 31, 2021 was \$1.9 million compared to \$1.0 million for the three months ended December 31, 2020.

About IDEAYA Biosciences

IDEAYA is a synthetic lethality focused precision medicine oncology company committed to the discovery and development of targeted therapeutics for patient populations selected using molecular diagnostics. IDEAYA's approach integrates capabilities in identifying and validating translational biomarkers with drug discovery to select patient populations most likely to benefit from its targeted therapies. IDEAYA is applying its research and drug discovery capabilities to synthetic lethality – which represents an emerging class of precision medicine targets.

Forward-Looking Statements

This press release contains forward-looking statements, including, but not limited to, statements related to (i) the timing of obtaining FDA guidance for potential darovasertib registrational pathway, (ii) the enrollment into expansion arms of the IDE397 clinical trial, (iii) the timing of obtaining preliminary clinical PD data from the dose-escalation portion of the IDE397 monotherapy Phase 1 clinical trial (iv) the timing of identification of a development candidate for a PARG inhibitor, (v) the timing of identification of a development candidate for a Pol Theta inhibitor, (vi) darovasertib clinical activity independent of HLA status, (vii) the impact of COVID-19, and (viii) the extent to which IDEAYA's existing cash, cash equivalents, and marketable securities will fund its planned operations. Such forward-looking statements involve substantial risks and uncertainties that could cause IDEAYA's preclinical and clinical development programs, future results, performance or achievements to differ significantly from those expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, the uncertainties inherent in the drug development process, including IDEAYA's programs' early stage of development, the process of designing and conducting preclinical and clinical trials, the regulatory approval processes, the timing of regulatory filings, the challenges associated with manufacturing drug products, IDEAYA's ability to successfully establish, protect and defend its intellectual property, the effects on IDEAYA's business of the worldwide COVID-19 pandemic, and other matters that could affect the sufficiency of existing cash to fund operations. IDEAYA undertakes no obligation to update or revise any forward-looking statements. For a further description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to the business of IDEAYA in general, see IDEAYA's recent Quarterly Report on Form 10-Q filed on May 10, 2021 and any current and periodic reports filed with the U.S. Securities and Exchange Commission.

IDEAYA Biosciences, Inc.

Condensed Statements of Operations and Comprehensive Loss

(in thousands, except share and per share amounts)

	Three Months Ended	
	March 31, 2021	December 31, 2020
Collaboration revenue	\$ 7,247	\$ 10,571
Operating expenses		
Research and development	11,566	12,051
General and administrative	4,816	3,800
Total operating expenses	16,382	15,851
Loss from operations	(9,135)	(5,280)
Interest income and other income (expense), net	114	145
Net loss	\$ (9,021)	\$ (5,135)
Change in unrealized gains (losses) on marketable securities	(7)	(28)
Comprehensive loss	\$ (9,028)	\$ (5,163)
Net loss per share attributable to common stockholders, basic and diluted	\$ (0.28)	\$ (0.18)
Weighted average number of shares outstanding, basic and diluted	31,761,207	29,149,106

IDEAYA Biosciences, Inc.
Condensed Balance Sheet Data
(in thousands)

	March 31, 2021	December 31, 2020
Cash and cash equivalents and short-term and long-term marketable securities	\$ 310,401	\$ 283,585
Total assets	326,097	298,269
Total liabilities	92,971	99,995
Total liabilities and stockholders' equity	326,097	298,269

SOURCE IDEAYA Biosciences, Inc.

For further information: IDEAYA Biosciences, Paul Stone, Senior Vice President and Chief Financial Officer, investor@ideayabio.com

<https://ir.ideayabio.com/2021-05-10-IDEAYA-Biosciences,-Inc-Reports-First-Quarter-2021-Financial-Results-and-Provides-Business-Update>