IDEAYA Announces Nomination of Development Candidate, IDE397, for MAT2A Synthetic Lethality Program Targeting MTAP-Deletion Patient Population

SOUTH SAN FRANCISCO, Calif., June 8, 2020 /PRNewswire/ -- IDEAYA Biosciences, Inc. (Nasdaq: IDYA), an oncology-focused precision medicine company committed to the discovery and development of targeted therapeutics for patient populations selected using molecular diagnostics, announced that it has selected development candidate, IDE397, for its Methionine adenosyltransferase 2a (MAT2A) Synthetic Lethality program. The MAT2A program targets patients with tumors having methylthioadenosine phosphorylase (MTAP) deletions. With the nomination of IDE397 as a development candidate for the MAT2A program, IDEAYA has initiated IND-enabling studies and is targeting filing the Investigational New Drug (IND) application in the fourth quarter 2020.

"With IDE397, we have achieved our preclinical target product profile of a differentiated compound, including potency, safety assessment, and physicochemical property characteristics. Based on the preclinical *in vivo* efficacy data we have generated, we believe IDE397 has the potential for evaluation in both monotherapy and combination studies in select solid tumor types with the genetic alteration of MTAP-deletion," said Michael Dillon, Ph.D., Chief Scientific Officer, IDEAYA Biosciences.

IDE397 Product Profile and MAT2A Program Summary:

- Monotherapy activity with robust tumor growth inhibition and pharmacodynamic (PD) modulation in multiple endogenous MTAP-/- *in vivo* models
- Monotherapy activity and tumor regression in HCT116 MTAP-/- xenograft model
- No changes in liver enzymes or increased unconjugated bilirubin levels observed in preclinical studies
- Favorable physicochemical properties and pharmacokinetics observed across multiple species
- MAT2A program enabled by structure-based drug design; over 17 high resolution co-crystal structures have been resolved to enable lead optimization

About MAT2A and MTAP-Deletion:
MTAP-null cells lack the ability to metabolize 5-methylthioadenosine, or MTA, which is an essential step in a biochemical pathway involved in salvaging metabolite S-adenosyl methionine, or SAM. Increased levels of MTA partially inhibit the methyltransferase PRMT5 for which SAM is the substrate. This partial inhibition renders MTAP-null cells more dependent on the activity of methionine adenosyltransferase II alpha or MAT2A, an enzyme that is responsible for the synthesis of SAM. Because of this dependence, loss of MTAP results in synthetic lethality when MAT2A is pharmacologically inhibited.

MTAP deletions are prevalent in approximately 15% of all human tumors across various tumor types. Genetic profiling tests for the deletion of MTAP or for the commonly co-deleted gene CDKN2A are commercially available.

About IDEAYA Biosciences
IDEAYA is an oncology-focused precision medicine 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 small molecule drug discovery to select patient populations most likely to benefit from the targeted therapies IDEAYA is developing. IDEAYA is applying these capabilities across multiple classes of precision medicine, including direct targeting of oncogenic pathways and 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) timing of filing of an IND for IDE397 and (ii) the potential for evaluation in both monotherapy and combination studies. 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 12, 2020 and any current and periodic reports filed with the U.S. Securities and Exchange Commission.

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For further information: Investor and Media Contact, IDEAYA Biosciences, Paul Stone, Chief Financial Officer, investor@ideayabio.com

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