



July 20, 2020

Dockets Management
Food and Drug Administration
5630 Fishers Lane, Rm 1061
Rockville, MD 20852

Re: Interpreting Sameness of Gene Therapy Products Under the Orphan Drug Regulations (FDA-2019-D-5392)

Submitted electronically

Dear Sir/Madam,

Biocom appreciates the opportunity to offer comments on the Food and Drug Administration (FDA) draft guidance [*Interpreting Sameness of Gene Therapy Products Under the Orphan Drug Regulations*](#) (“draft guidance”).

Biocom is the largest, most experienced leader and advocate for California’s life science sector, which includes biotechnology, pharmaceutical, medical device, genomics and diagnostics companies of all sizes, as well as research universities and institutes, clinical research organizations, investors and service providers. With more than 1,300 members dedicated to improving health and quality of life, Biocom drives public policy initiatives to positively influence the state’s life science community in the research, development, and delivery of innovative products. California’s life sciences industry generates \$372 billion in annual economic output, boosts the state's total gross product by \$212 billion, supports over 1.4 million jobs, and increases labor income by more than \$115 billion per year¹.

We commend the agency on its ongoing efforts to develop a comprehensive gene therapy framework. With over 100 members in the cell and gene therapy sector, Biocom is committed to engaging with the Agency on developing a regulatory framework that spurs innovation and access to potentially life-saving treatments while ensuring safety and efficacy. We thank the FDA for issuing guidance to help sponsors developing gene therapies determine whether their therapy is the same as another product when aiming to apply for orphan drug designation and orphan drug exclusivity. Biocom is generally supportive of the draft guidance and offers the following comments for consideration.

¹ Biocom 2020 Economic Impact Report Databook. <https://www.biocom.org/eir/>



Although gene therapies can be eligible for orphan drug designation and orphan drug exclusivity, uncertainty can arise when trying to determine if the FDA considers two gene therapies to be the same drug for orphan purposes. FDA regulations define “same drug” for drugs composed of large molecule(s) as a drug that contains the same principal molecular structural features (but not necessarily all of the same structural features) and is intended for the same use or indication as a previously approved drug, except that if the subsequent drug can be shown to be clinically superior, it will not be considered to be the same drug².

For gene therapy products, the draft guidance, states the FDA’s determination of sameness will be based on the principle molecular structural features such as transgenes and vectors. The Agency provides case examples to demonstrate scenarios where it would consider two gene therapies as the same or different. FDA will consider that two gene therapy products are different if they express different transgenes and/or use different vectors. If vectors from the same viral class are used then sameness will be determined on a case-by-case basis. When applicable, the FDA also generally intends to consider additional features (e.g., regulatory elements, cell type that is transduced) that can contribute to the therapeutic effect.

Biocom supports the FDA’s approach in determining sameness between two gene therapy products. The examples are clear and concise and help to illustrate the factors that FDA intends to consider. We recommend the Agency to include in the final guidance case examples of scenarios involving “additional features” and clarify what characterizes a “minor difference” or other factors that would lead the Agency to conduct its determination on a case-by-case basis.

Regulators must keep pace as the science and technology associated with cell and gene therapies continue to rapidly advance. With many countries establishing regulatory frameworks for cell and gene products and clinical studies being conducted in more countries to help accelerate development, Biocom applauds the Center for Biologic Evaluation and Research (CBER) on its efforts to develop a comprehensive gene therapy framework and work on global regulatory convergence. FDA predicts that by 2020 it will be receiving more than 200 investigational new drug (IND) applications per year and approving 10 to 20 cell and gene therapy products per year by 2025 based on an assessment of the current pipeline and the clinical success rates of these products³.

Biocom encourages the agency to continue its efforts as it is vital for stakeholders to fully understand how gene therapy products are regulated, and regional or national regulatory differences to enable the most efficient product development to serve patients in need. Biocom also understands that as gene therapy products continue to advance and more data is collected, the determination of “sameness” will evolve and additional examples will be available to illustrate potential cases. We ask the agency to continue to share knowledge and include industry in ongoing discussions regarding “sameness.”

² 21 CFR 316.3(b)(14)(ii)

³Statement from FDA Commissioner Scott Gottlieb, M.D. and Peter Marks, M.D., Ph.D., Director of the Center for Biologics Evaluation and Research on new policies to advance development of safe and effective cell and gene therapies <https://www.fda.gov/news-events/press-announcements/statement-fda-commissioner-scott-gottlieb-md-and-peter-marks-md-phd-director-center-biologics>

Biocom comments on interpreting sameness of gene therapy 3

Thank you again for the opportunity to provide these comments. We look forward to a continued dialogue with the FDA on improving the regulatory framework for gene therapy products. If you have any questions about these comments, please contact Brittany Blocker, Manager of Regulatory Affairs at bblocker@biocom.org.

Sincerely,

A handwritten signature in black ink that reads "Joe Panetta". The signature is written in a cursive style with a large, prominent initial "J".

Joe Panetta
President and CEO
Biocom