Date: Wednesday, August 9, 2023

To: Institute for Clinical and Economic Review (ICER)
14 Beacon Street, Suite 800, Boston, MA 02108

RE: California Technology Assessment Forum (CTAF) Public Meeting on Sickle Cell Disease

Dear Dr. Pearson,

We have noted several key limitations to ICER's ability to reflect patient-centric dimensions within cost-effectiveness modeling.

Cost-Effectiveness Model and Limitations

1. This model does not bring a comprehensive view of what matters most to sickle cell disease (SCD) patients. Capturing a patient-centric dimension of value is crucial to demonstrating the value that new innovations can have. Many patient-important outcomes are omitted from ICER's cost-effectiveness model for SCD despite strong and repeated emphasis on their importance. Sick Cells identified the top two disease impacts that mattered most to patients - mental health effects and overall quality of life. Neither of these are included as complications in the model.
2. Sick Cells served as a liaison during ICER's focus group with four patients and four caregivers; however, those sessions primarily informed the Patient Perspective paragraphs of the report and did not include members of ICER's economic modeling team.
3. ICER used inappropriate health state utility score data to reflect patient experience. Health-related quality of life weights that are used to generate the QALYs incorrectly assume "uncomplicated SCD" to be 0.8 utility value. The referenced study did not measure uncomplicated SCD.[1] Anie notes, "patients were not completely pain-free on discharge and importantly at 1-week follow-up."
4. ICER's current Value Assessment Framework perpetuates existing disparities. As stated by Dr. Power-Hays and Dr. McGann[2], "there may be no population of patients whose health care and outcomes are more affected by racism than those with sickle cell

[1] Anie KA, Grocott H, White L, Dzingina M, Rogers G, Cho G. Patient self-assessment of hospital pain, mood and health-related quality of life in adults with sickle cell disease. BMJ Open. 2012;2(4):e001274. Published 2012 Jul 2. doi:10.1136/bmjopen-2012-001274

[2] Power-Hays A, McGann PT. When Actions Speak Louder Than Words - Racism and Sickle Cell Disease. *N Engl J Med*. 2020;383(20):1902-1903. doi:10.1056/NEJMp2022125

disease." Without the use of an equity-informative economic model, ICER is unable to account for these disparities in their base-case results.

Conduct of Public Meeting on Sickle Cell Disease

SCD is a genetic blood disorder that disproportionately impacts Black and Hispanic people in the U.S. For this review, bluebird bio and Vertex clinical trials enrolled nearly 100% Black patients. The SCD community faces a burden of stigma associated with the diagnosis itself and social consequences of the racial makeup of the population.

Many aspects of the meeting conduct were deeply concerning. We highlighted a few key moments:

1. Dr. Pearson repeatedly commented that SCD advocates Jimi Olaghere, Tesha Samuels, and Jeannie Kittrell spoke "eloquently." This was a microaggression.
2. CTAF discussed if an approval of a gene therapy will impact "society's goal of reducing health inequities." The question is inappropriate while discussing drug pricing and policy as the conversation shifted towards if an approval of gene therapy will reduce racism in the healthcare system. Jimi Olaghere, a patient expert, and Dr. Calhoun, a provider expert, explained that gene therapy is not a cure for racism, and that racism informs our society. CTAF continued the discussion, and from our perspective overlooked the comments of Jimi Olaghere and Dr. Calhoun. CTAF later voted on the question. This point of conversation exemplifies CTAF's and ICER's own tone deafness and need to be educated on how racism impacts healthcare delivery in America and for SCD patients.
3. The racial makeup of ICER's SCD review team and CTAF do not match the demographic of the population they are commenting on and for which they are making decisions.
4. ICER and CTAF require more education about SCD. We outlined the following discrepancies and concerns:
    a. A lack of discussion about the disconnect between the provider and patient communities as it relates to realities surrounding hydroxyurea;
    b. Dr. Pearson alluded to a scenario where a "tough" SCD patient would fabricate pain crises and visit the ED more to qualify for a gene therapy trial, thus perpetuating a classic and harmful SCD trope;
    c. Limited understanding of standard of care (SOC) and lack thereof for SCD;
    d. Dr. Rind commented on Black patients having a problem of pain management and opioids in the ED. This comment appeared unwarranted and heedless;
    e. Comparison to thalassemia and dermatitis, both inequivalent comparisons to SCD;
    f. Mishandling of and cavalier approach to discussions surrounding mental health, suicide, trauma, fertility and impacts of racism on SCD patients and families.

5. Several CTAF members recommended these gene therapy trials should be restructured as randomized control trials (RCT). The use of an RCT model for SCD gene therapies is unethical due to the substantial burden of the trial on those participating and the historical and continued medical maltreatment of SCD patients, who also disproportionately are Black/African American. This was an unethical and deeply concerning conversation to witness. ICER and its decision-making bodies must undergo inclusivity and diversity training and review, at a minimum, the following case studies of unethical research practices:
    a. Tuskegee Experiment
    b. Henrietta Lacks Case Study

Thank you for this opportunity to comment.

Sincerely,
Ashley Valentine, President of Sick Cells