Good morning members of the House Health Committee.

My name is Jennifer Cullen from Bay Village, Ohio. I am a Professor at the Case Western Reserve University School of Medicine, as well as a member of the Case Comprehensive Cancer Center's leadership team, as its Associate Director of Cancer Population Sciences.

I am here today in support of House Bill 608, in part due to my professional experience in developing and validating biomarkers to forecasting prostate cancer outcomes, but also as a parent of a child who died from cancer..

First, in my professional roles, I have been part of industry sponsored studies to develop and validate biomarker assays to risk-stratify prostate cancer who can safely delay invasive therapies, like surgery and radiation, and instead follow disease management strategy known as Active Surveillance. Prostate cancer is the most newly commonly diagnosed malignancy in US men so the importance of this topic is great, as most men will live for many years with disease that will *not progress*, yet undergoing therapy is associated with meaningful decrements in quality of life including urinary/bowel/sexual and hormonal function and bother. As a result, there has been an explosion in the number studies and effort in the cancer research field, to develop biomarkers tools that will identify men who can safely delay therapy for prostate cancer, as well as biomarker tools for detection and predicting outcomes for many malignancies. The biomarker assay tool that I helped validate with Genomic Health (*now, Exact Sciences*) is now recognized in national clinical guidelines, along with 2 other tools.

As I attend national cancer oncology meetings, biomarker testing has becoming a leading topic in how we ca improve optimal cancer care delivery, sometimes referred to as precision oncology or tailored therapy. While these terms are not new, they are slowly making their way into every oncology clinic in the nation. In fact, in just 2 days, Chicago will host the American Society of Clinical Oncology meeting where thousands of oncology care professionals will descend on the city and be discussing the critically important topics of how we can expand efforts for biomarker testing and begin to develop, validate and disseminate biomarker testing for *all cancers*, not merely the current cancers that have approval and endorsement for us, in national guidelines such as the National Comprehensive Cancer Network.

Now, I want to briefly share the personal reason that this topic is so important to me. In 2011, my daughter Alexandra who was 3 ½, was diagnosed with an aggressive form of brain cancer. In the 13 months that she would fight her battle, there was a seminal publication released by the journal *Nature* that identified a way to group children with Alexandra's cancer type, known as Medulloblastoma, based on a handful of tissue-based genetic markers. The group a child falls into could help delineate who would benefit from which treatment, and in what order (i.e., surgery, radiation and chemotherapy). A child's grouping would also help forecast who harbors disease that is very likely to behave "refractory" or unresponsive to treatment and likely to relapse. Now, 10 years later, that 4-group system is now being used in treatment decision-making discussions between providers and parents of children with this disease. Having such information might have changed how we spent our final months with her -- rather than many aggressive therapies, there would have been a recommendation for focusing on quality of life and time together time to say goodbye.

The field of biomarker research is growing at a breakneck pace, with constant new discoveries from academic researchers as well as pharma/industry. This has been, and will continue to be, the direction of the oncology field, with the goal of attaining the best cancer outcomes, with an emphasis on equity for all patients.

I thank you for your time today and I am happy to take any questions.

Thank you so much!

Jennie