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Seema Verma
Administrator
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Centers for Medicare & Medicaid Services
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RE: Reconsideration of National Coverage Determination (NCD) 90.2 for Next Generation Sequencing (NGS) for Medicare Beneficiaries with Advanced Cancer (CAG-00450R)

Dear Director Jensen,

ZERO – The End of Prostate Cancer is a leading advocate for the prostate cancer patient community by advancing research, encouraging action, and providing education and support to men and their families through our patient-centric programs. On behalf of the prostate cancer patient community, ZERO appreciates the opportunity to comment on your reconsideration of NGS testing for Medicare Beneficiaries with Advanced Cancer.

Benefits to Prostate Cancer Patient Families From NGS Test Results

ZERO is concerned that a potential decision by CMS to limit the coverage of germline NGS testing to advanced stage cancers, including prostate cancer, will have a number of negative repercussions not only for patients, but for their family members as well.

There is a growing and promising body of evidence now to support that individuals with certain germline genetic mutations are more responsive to certain therapies [1-4]. Furthermore, this evidence provides support for expanding covered testing beyond that of *BRCA1/2*. A cost effective and efficient approach to genetic testing is through panels that include multiple genes known to be associated with a particular cancer type, such as prostate cancer. Clinical germline testing labs currently offer panels for prostate cancer that include genes such as *ATM*, *RAD51C/D*, and the Lynch syndrome mismatch repair genes, all of which are implicated in having a positive treatment impact [5-7]. Even though these treatments are not yet standard of care, by denying coverage of clinical germline testing to individuals with either early or advanced cancer in the future, this may limit access to new therapeutic strategies as the research progresses. In addition, individuals with hereditary cancer syndromes are at increased for developing more than one cancer, so denying patients' access to germline testing limits the ability of their clinical care teams to properly monitor and screen these patients.

One of the main principles of genetic testing is that in a family that appears suspicious for a hereditary cancer syndrome, testing an individual in the family who has developed cancer will be the most informative and efficient. By potentially limiting access to germline genetic testing for patients with advanced cancer, this also limits access to the patients' family members who might be at risk. The identification of a germline mutation provides the opportunity for family members to undergo testing to better define their risk and have access to potentially life-saving preventative screening and/or prophylactic surgeries. Furthermore, the ability to *rule out* a hereditary cause for cancer in a patient can provide a tremendous amount of reassurance to a patient and their at-risk family members.

A pertinent example is *BRCA1/2* germline mutations, which cause hereditary breast and ovarian cancer syndrome. There is a typical pattern of cancers that can be seen in female family members that raises the suspicion for hereditary breast and ovarian cancer (HBOC). However, men with *BRCA1/2* mutations are at increased risk for more aggressive prostate cancer, as well as other cancers, but the cancer risks are not as high as those seen for women. A positive *BRCA1/2* mutation also allows providers to fully understand the therapeutic utility of early stage prostate cancer treatments such as *watchful waiting* or *active surveillance*, which a growing number of providers are recommending, versus initiating a therapeutic treatment strategy earlier.

In the situation that a *BRCA1/2* mutation is inherited from the paternal side of the family, which may have a small structure and/or not many female relatives, the typical pattern of HBOC-related cancers may go unappreciated until later generations. There is the opportunity to identify these types of germline mutations in men with prostate cancer before future generations of the family develop cancer.

Conclusion

ZERO appreciates the opportunity to offer our comments on NGS testing for Medicare Beneficiaries with Advanced Cancer. If you have any questions regarding our comments, please contact Matt Marks at (202) 664-4342 or matt@zerocancer.org.

Sincerely,



Jamie Bearse
President & CEO
ZERO – The End of Prostate Cancer

References

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