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NCCN Guidelines Panel: Acute Lymphoblastic Leukemia

On behalf of Adaptive Biotechnologies and in light of the recent FDA clearance of the clonoSEQ NGS-MRD Assay in ALL, we request that the NCCN ALL Guideline Panel review the below supplemental modifications to our original submission on September 13, 2018.

clonoSEQ® Intended Use (FDA Clearance received: September 28, 2018)

The clonoSEQ Assay is an in vitro diagnostic that uses multiplex polymerase chain reaction (PCR) and next-generation sequencing (NGS) to identify and quantify rearranged IgH (VDJ), IgH (DJ), IgK, and IgL receptor gene sequences, as well as translocated BCL1/IgH (J) and BCL2/IgH (J) sequences in DNA extracted from bone marrow from patients with B-Cell acute lymphoblastic leukemia (ALL) or multiple myeloma (MM).

The clonoSEQ Assay measures minimal residual disease (MRD) to monitor changes in burden of disease during and after treatment. The test is indicated for use by qualified healthcare professionals in accordance with professional guidelines for clinical decision-making and in conjunction with other clinicopathological features.

The clonoSEQ Assay is a single-site assay performed at Adaptive Biotechnologies Corporation.

Specific Changes

1. Page 29, Version 1.2018: Add the following underlined text under ALL-F (underlined = 13 Sept submission; *red* = current supplemental revision):
 - “Current 6-color flow cytometry or PCR methods can detect leukemic cells at a sensitivity threshold of $<1 \times 10^{-4}$ (<0.01%) bone marrow mononuclear cells (MNCs). *If 1 million cells are analyzed, clonoSEQ® can detect leukemic cells as a sensitivity threshold that approaches 1 in 1×10^6 (<0.0001%)* The concordance rate for detecting MRD between NGS, flow cytometry, and PCR is generally high. NGS has been shown to identify additional patients with MRD that were identified as MRD-negative by flow cytometry. *A single NGS-MRD assay has been cleared by the FDA for monitoring of MRD in B-ALL (clonoSEQ®, see Technical Summary)*

Rationale

Request: This modification request reflects the recent FDA clearance of the clonoSEQ® NGS-MRD assay. Please see the Technical Summary for clonoSEQ® for full details.

The following PDFs are submitted in support of this proposed change.

1. clonoSEQ®. [technical summary]. Seattle, WA: Adaptive Biotechnologies Corporation; 2018.