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(54) Title: CELL-FREE DNA DAMAGE ANALYSIS AND ITS CLINICAL APPLICATIONS

(57) Abstract: Cell-free DNA fragments often include jagged ends, where one end of one strand of double-stranded DNA extends beyond the other end of the other strand. The length and amount of these jagged ends may be used to determine a level of a condition of an individual, a fractional concentration of clinically-relevant DNA in a biological sample, an age of individual, or a tissue type exhibiting cancer. The jagged end length and amount may be determined using various techniques described herein.