

**Supplemental Table 1: Definitions of chromoplexy and chromotripsis phenomenon.**

<b>Chromoplexy</b>	<b>Chromotripsis</b>
<p><b>Also named “closed chains reaction”</b> is characterized by small numbers of genomic rearrangements (4 to 12) that may involve multiple chromosomes and seems to be due to errors in transcription or chromatin regulation. Unexpectedly, a recent report have used whole-genome sequencing and molecular pathological analysis to track the clonal lethal clone revealed that the lethal clone derive from the low-grade cancer focus in the primary tumor and not from the high grade ones.</p>	<p><b>“Catastrophe” phenomenon</b>” is related to mitosis errors and involves a large number of rearrangements (10s to 100s) but concentrated on 1 to 2 chromosomes. This genomic instability is also associated to signature of hypermutation in the vicinity of DNA breaks.</p>