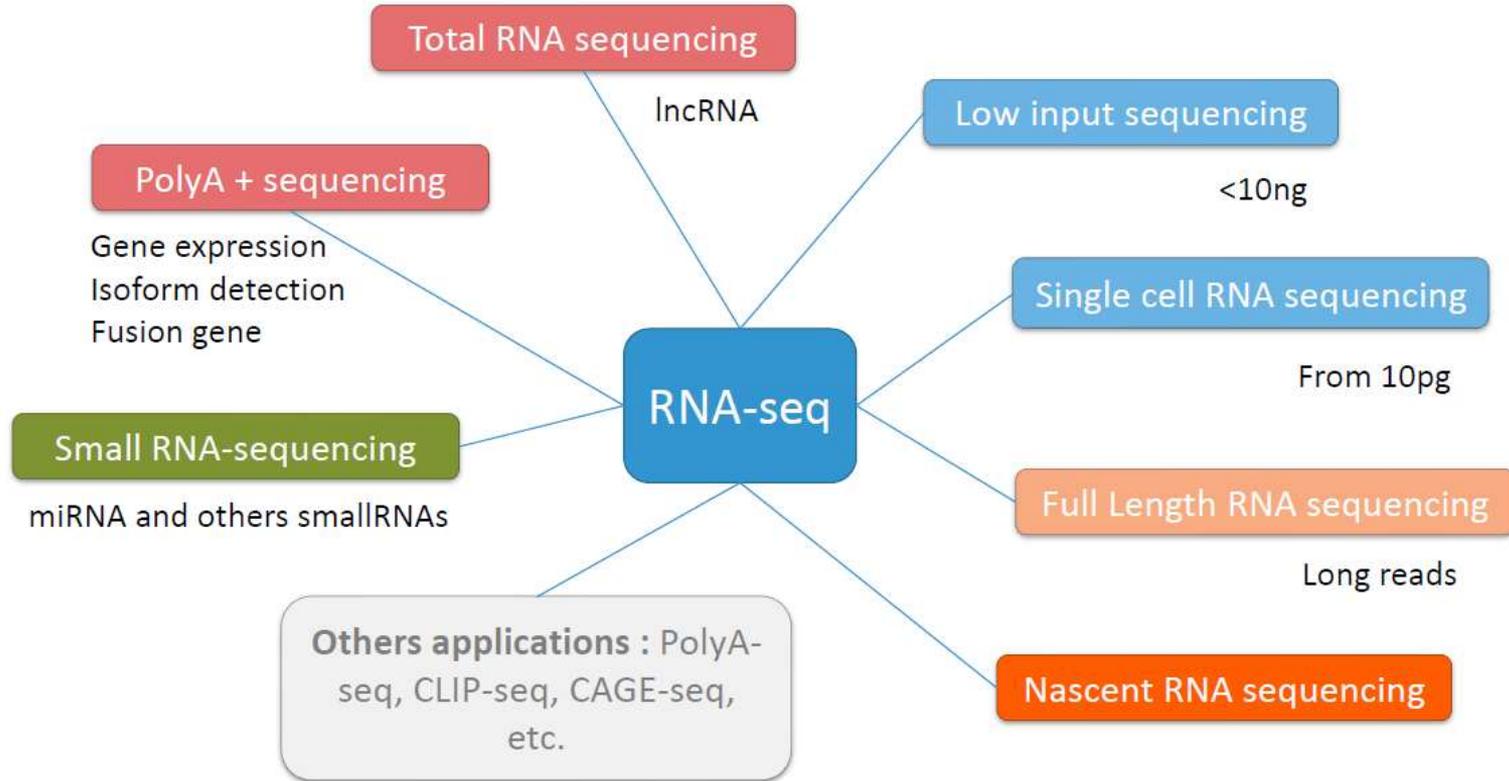
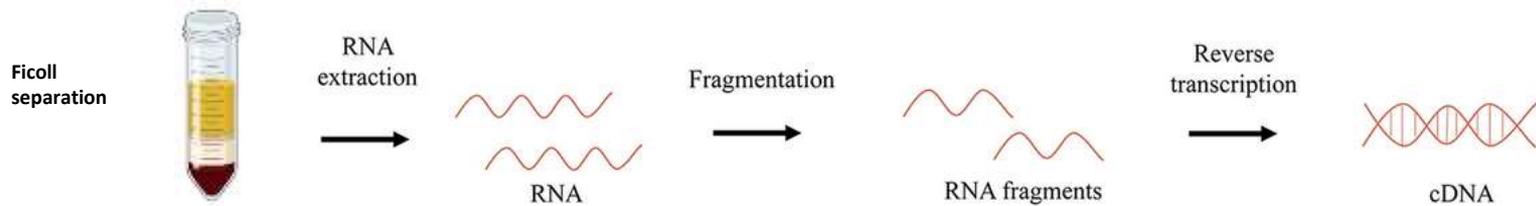


Principes techniques et apports du RNAseq dans les hémopathies malignes

RNAseq Technique – Type d'ARN

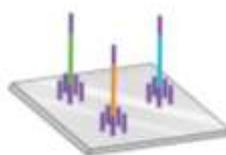


RNAseq Technique - Wetlab

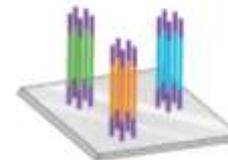


Library Preparation
-> RNAseq ciblé

Library hybridization

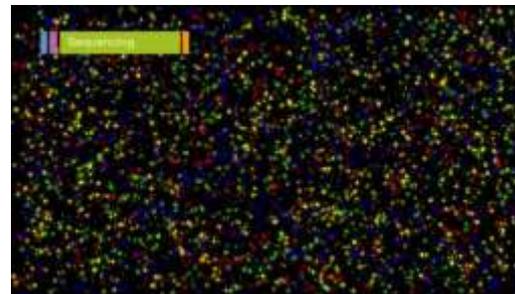


Amplified clusters



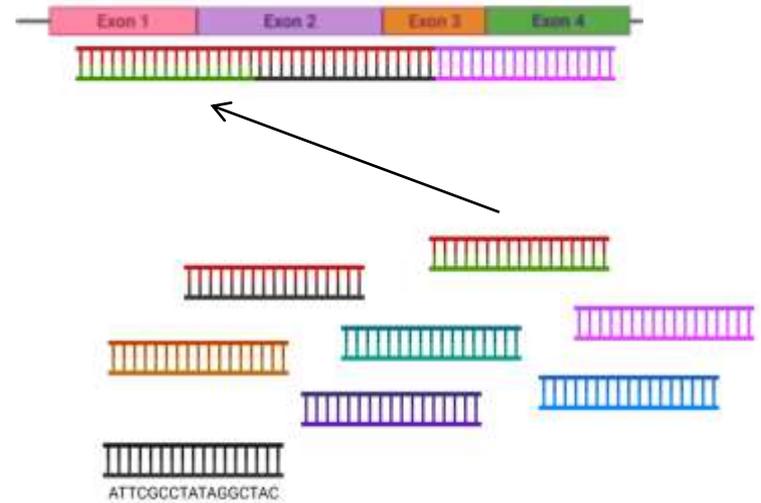
Sequencing

Fluorescently labeled nucleotides



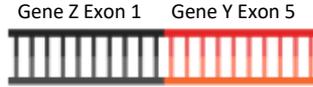
RNAseq Technique - Bioinformatique

- 1) Obtention séquence (fastq)
- 2) Alignement sur le génome (BAM)
- 3) Analyse
 - 1) Recherche de fusion
 - 2) Table de compte

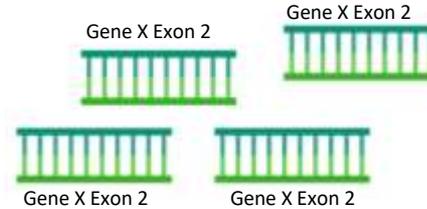


Applications du RNAseq

- Transcrits de fusion



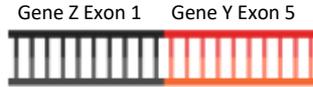
- Niveau d'expression d'un gène



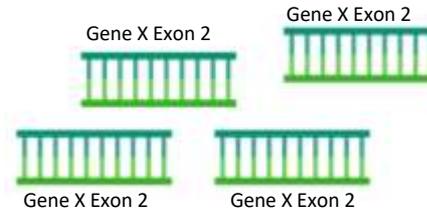
- Conséquence d'une mutation

Applications du RNAseq

- **Transcrits de fusion**

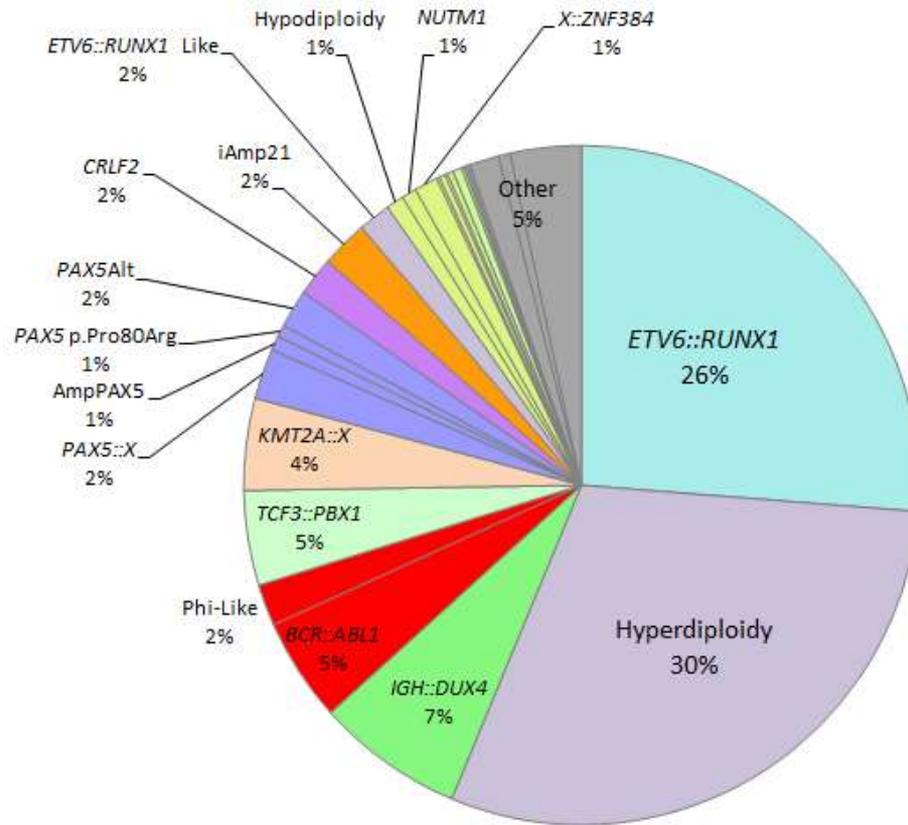


- Niveau d'expression d'un gène

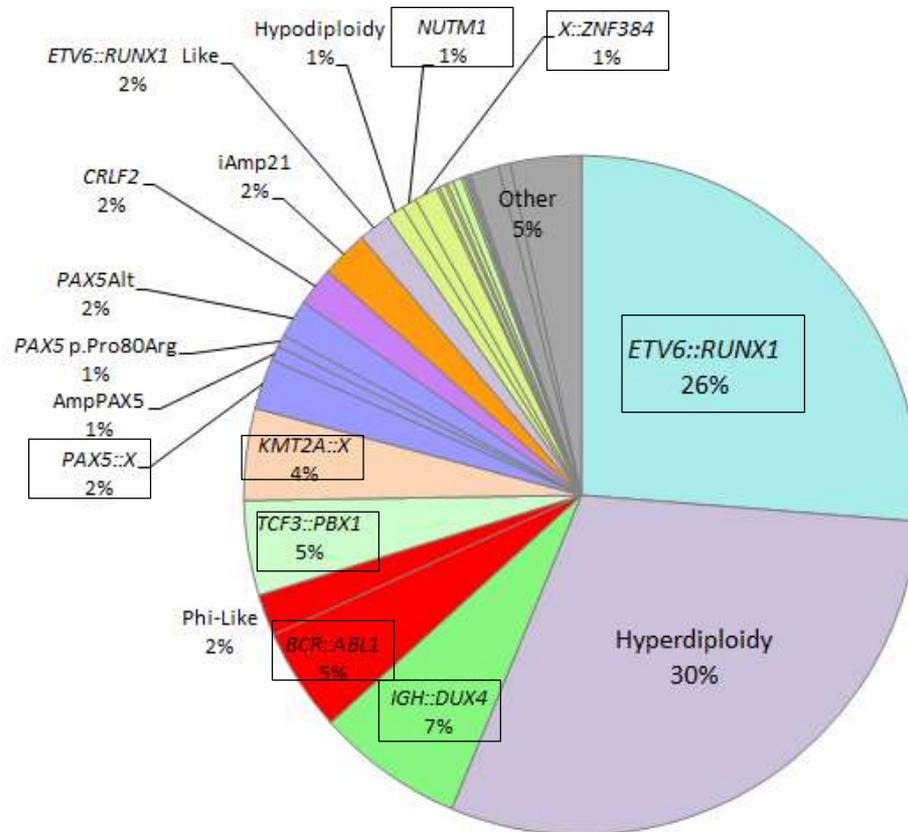


- Conséquence d'une mutation

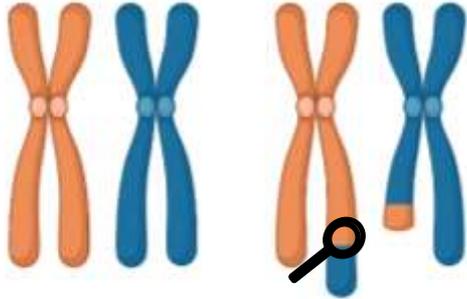
RNAseq – Anomalies classantes LAL B pédiatrique



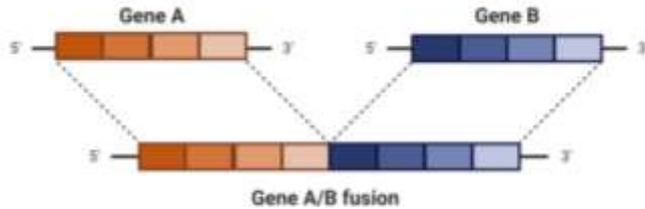
RNAseq – Anomalies classantes LAL B pédiatrique



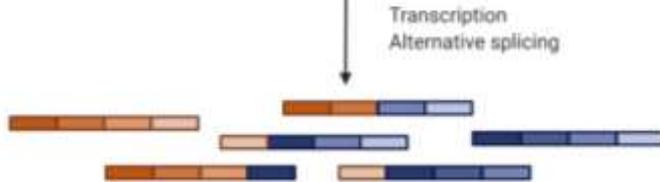
RNAseq – Transcripts de fusion



DNA



RNA



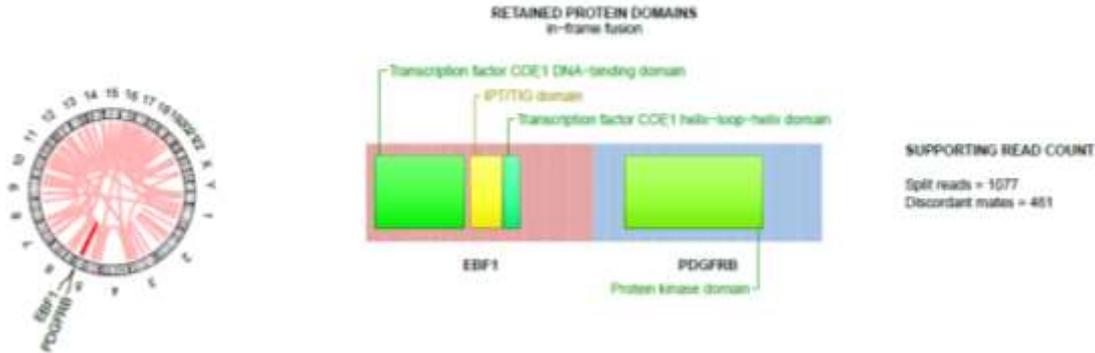
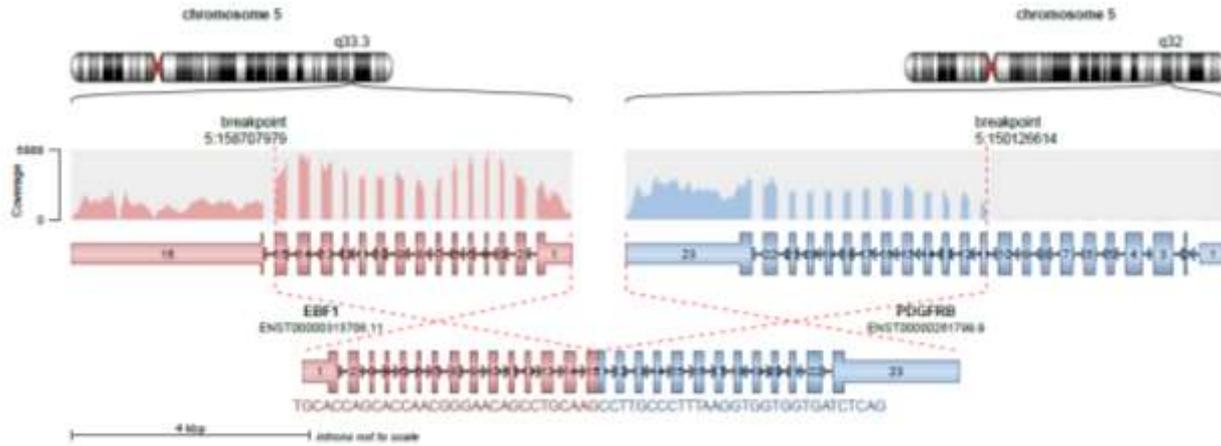
Split read



Discordant mates

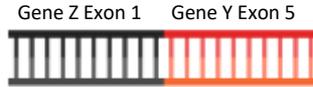


RNAseq – Transcripts de fusion

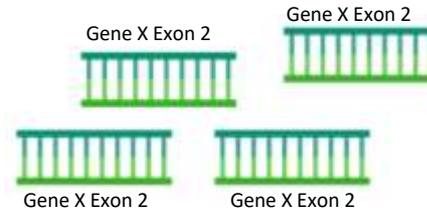


Applications du RNAseq

- Transcrits de fusion

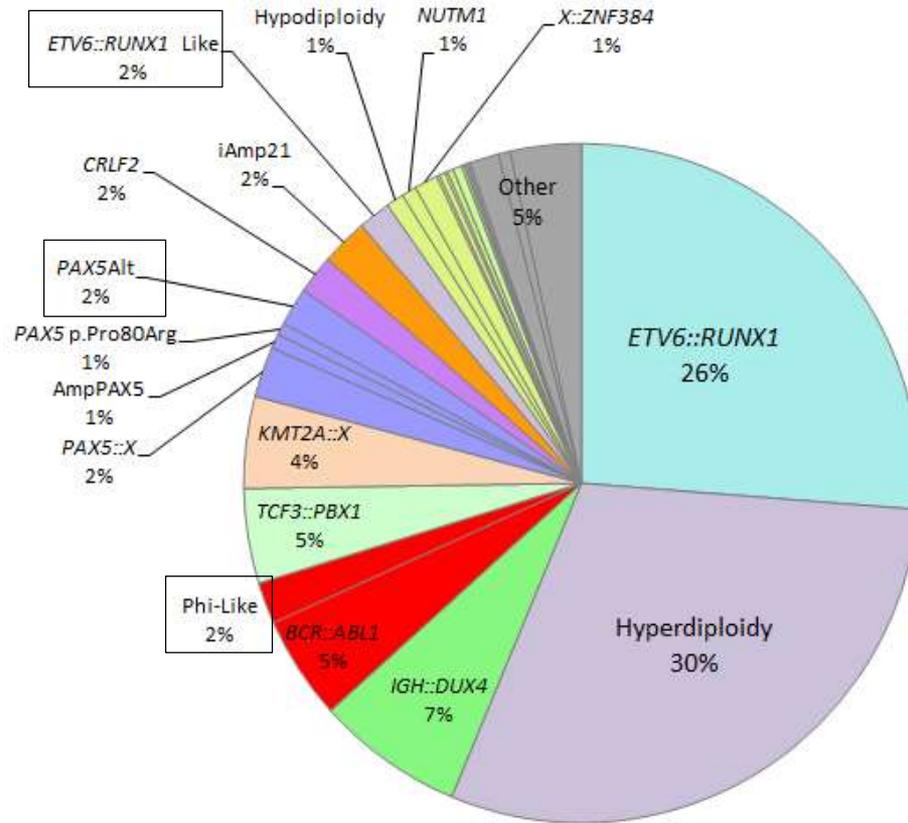


- Niveau d'expression d'un gène



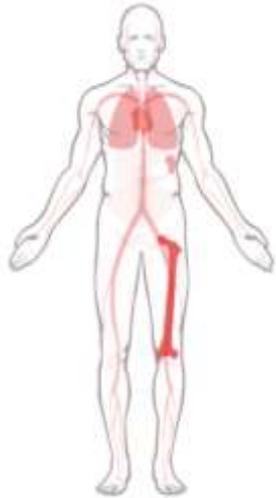
- Conséquence d'une mutation

RNAseq – Anomalies classantes LAL B pédiatrique

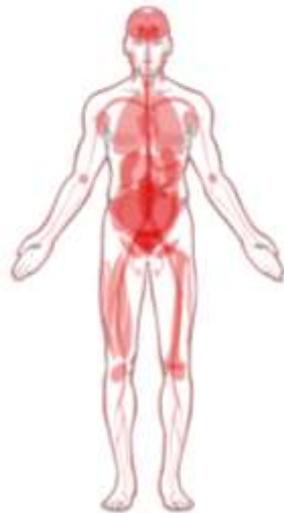


RNAseq – Différence d'expression

Physiologique



ELAN



STAG2

Pathologique

Normal Cell

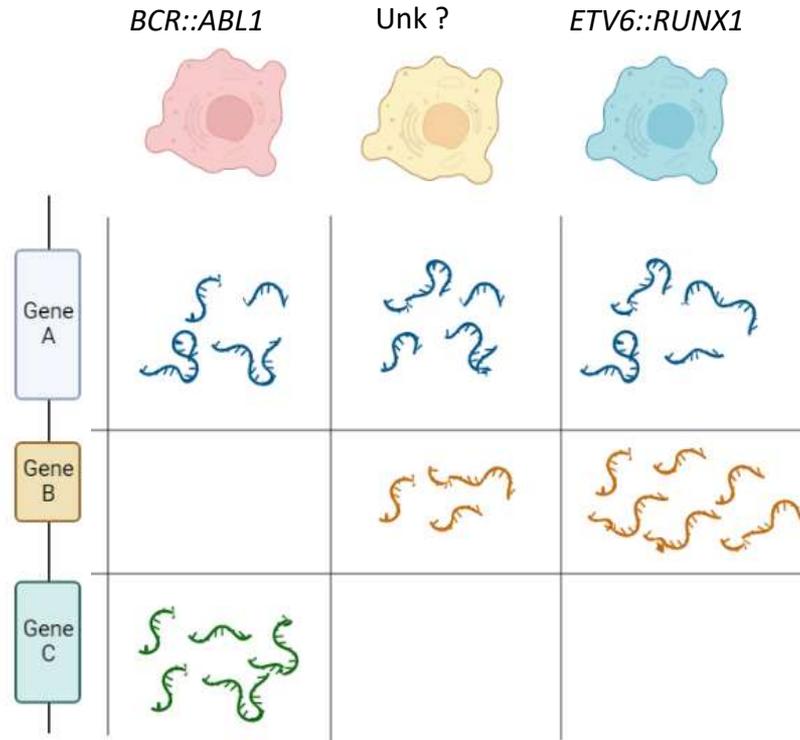


Cancer Cell

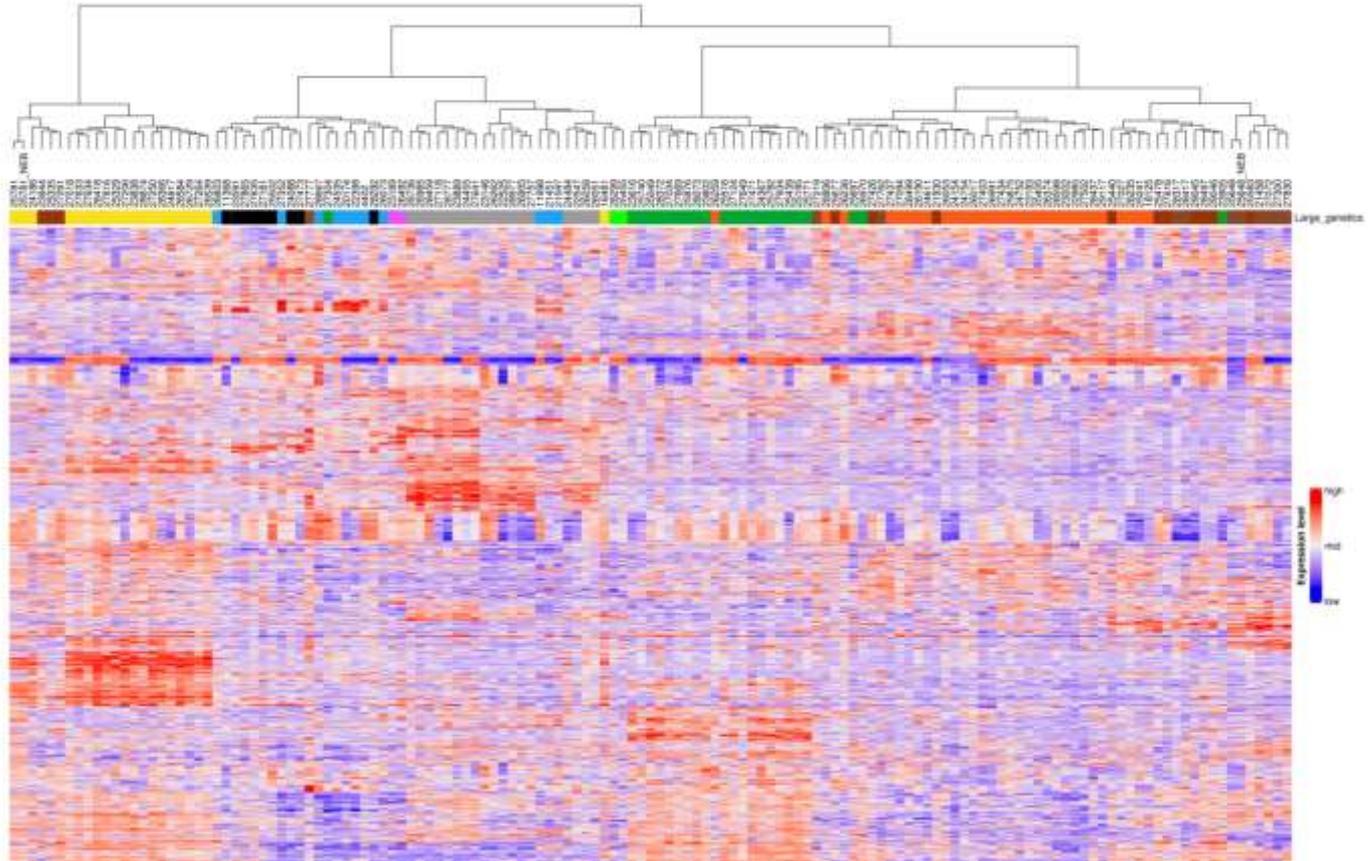


RNAseq – Clustering

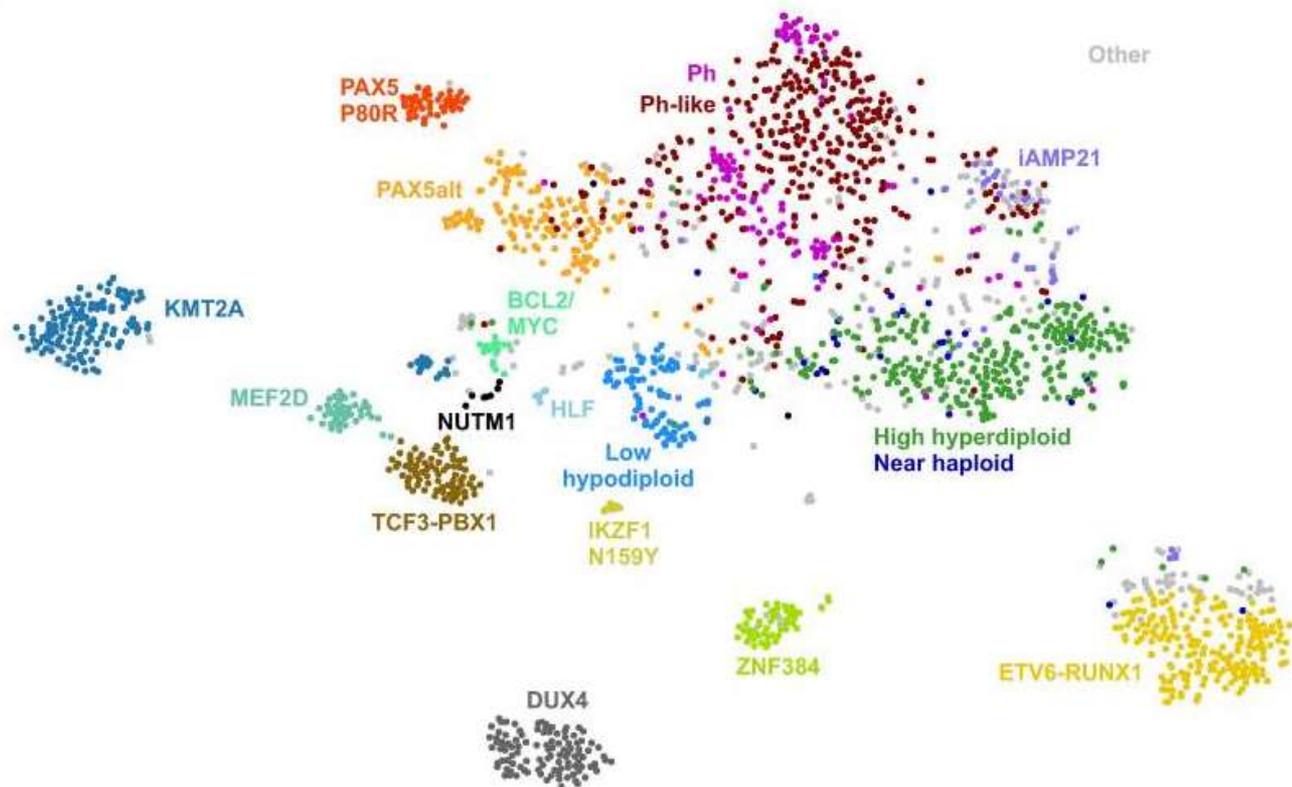
Différence d'expression génique



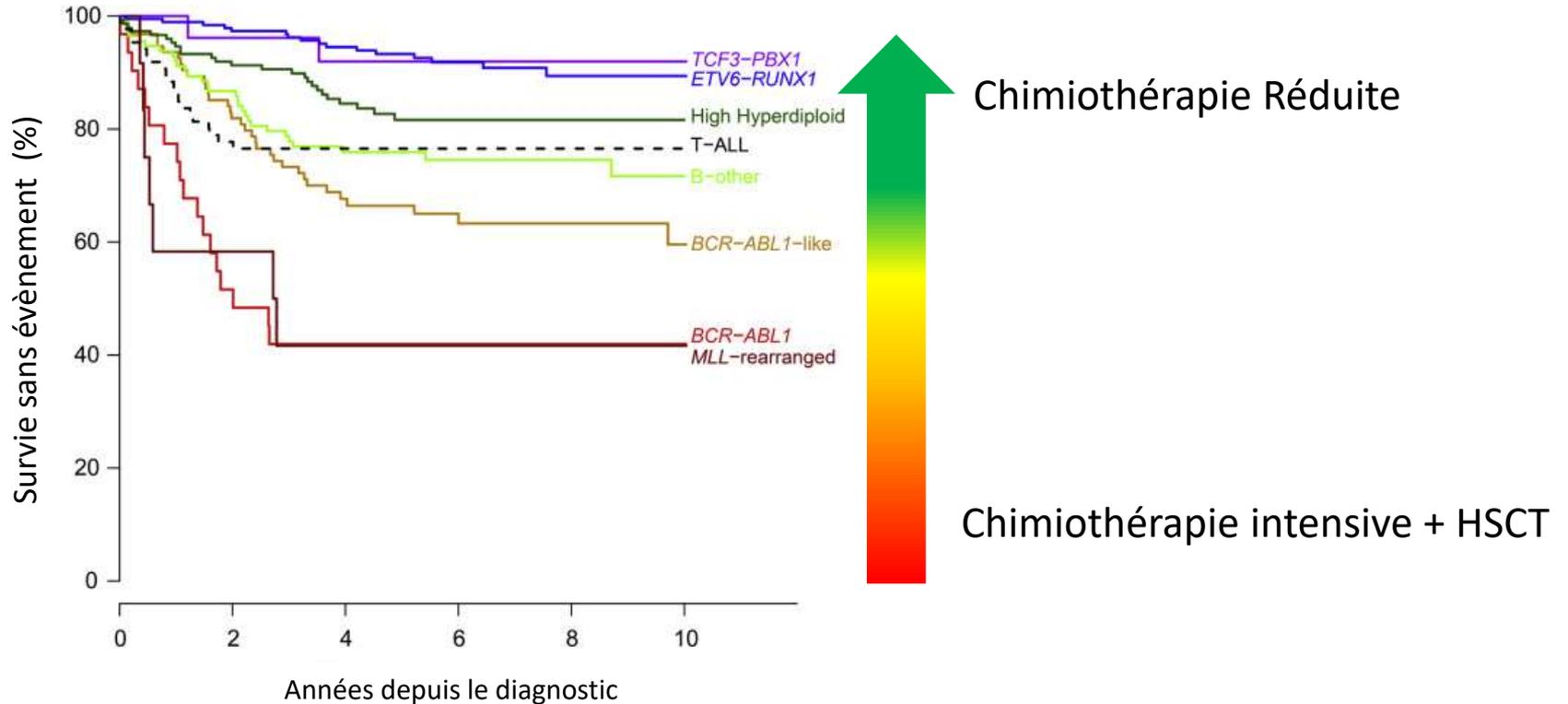
RNAseq – Clustering



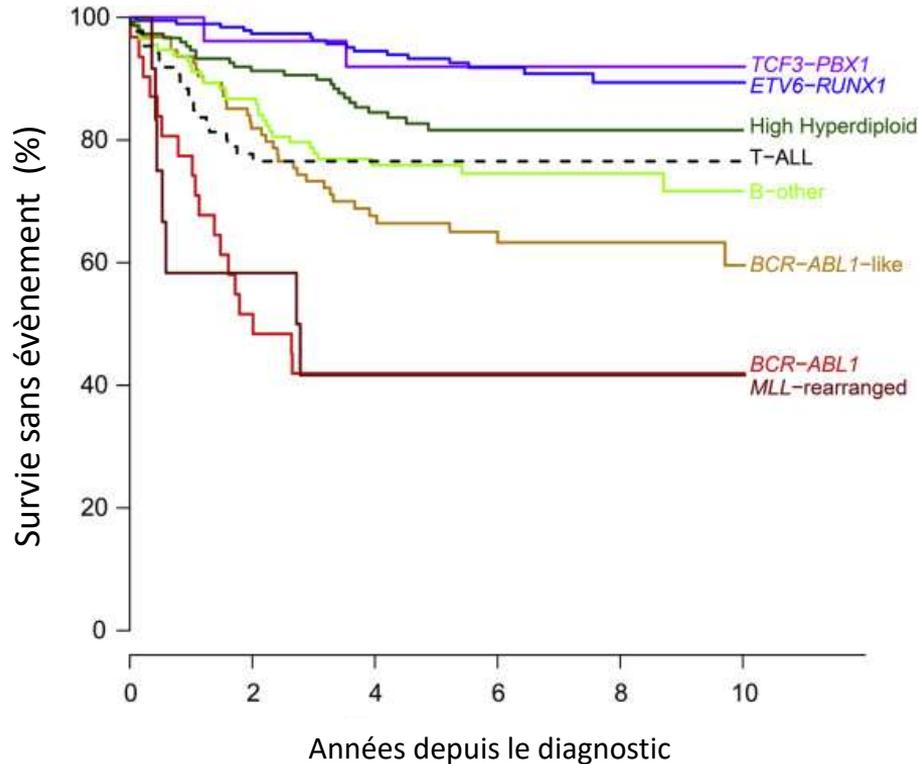
RNaseq – Clustering



RNAseq – Place en routine diagnostic



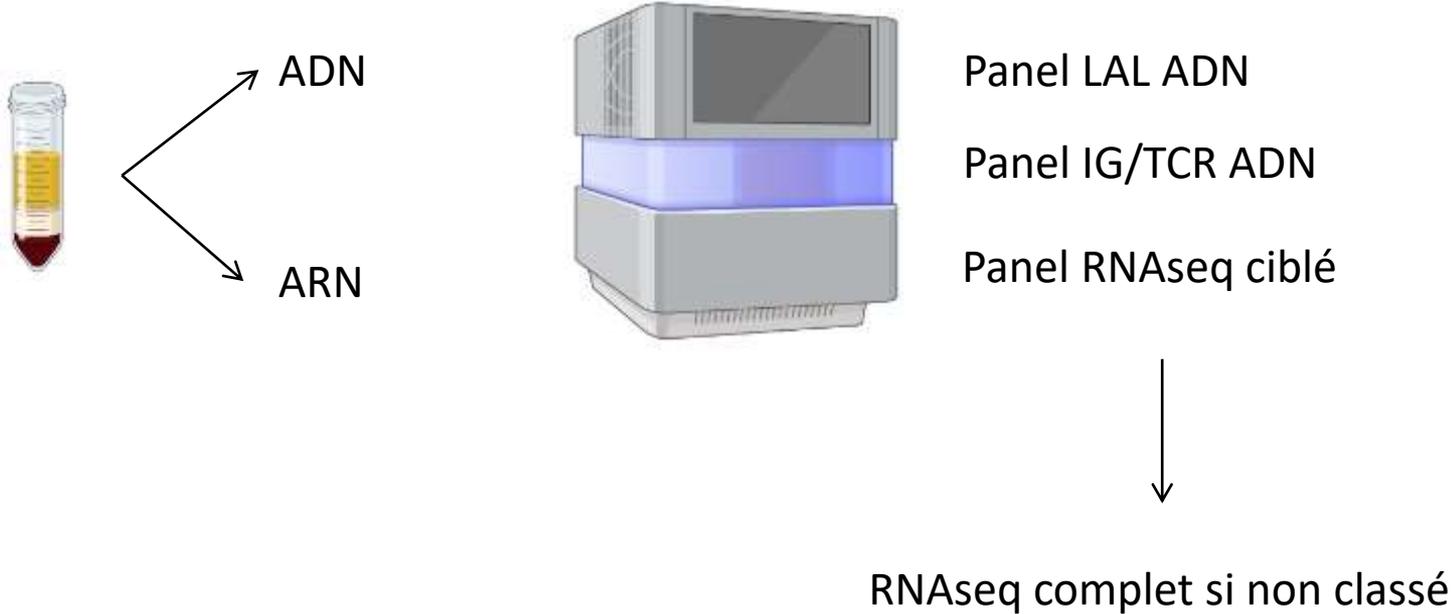
RNAseq – Place en routine diagnostic



BCR:ABL1 Like
-> Utilité des ITK?

ETV6:RUNX1 Like
Décrit en 2016
Pronostic?

RNAseq – Place en routine diagnostic



Merci de votre attention



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