The beneficial effects of bromodomain and extra-terminal domain (BET) protein inhibition in myelosuppressive conditions

Acetylated histones

MYC expression

MYC

BET family

HEMATOLOGICAL MALIGNANCIES: myeloid leukemia, lymphoma, multiple myeloma

BET inhibitor JQ1

MYC expression

MYC

JQ1

• ↓ numbers of pre-, immature and mature B cells
• ↑ apoptosis in T cells
• ↓ cellularity in thymus, bone marrow and spleen

• ↑ proliferation of long-term hematopoietic stem cells
• ↑ apoptosis in T cells
• ↑ engraftment of hematopoietic stem cells

Wroblewski et al., Haematologica, 2018