

**Supplementary Table S1** Novel targeted therapies in development<sup>1,16</sup>

Sl. No.	Subtype	Potential targeted therapies	Genetic Predictors of efficacy
1	MCD	Inhibitors of BCR/TLR signaling BTKi: Ibrutinib PKCβi: Enzastaurin SYKi: Entospletinib	<i>For Ibrutinib</i> Positive predictor: MYD88L265P/CD79 mutations Negative predictor: CARD11 mutations, TNFAIP3 inactivation
2	BN2	BCL2i: Venetoclax Inhibitors of BCR/TLR signaling BTKi: Ibrutinib PKCβi: Enzastaurin SYKi: Entospletinib	<i>For Venetoclax</i> Positive predictor: MYC and BCL2 translocation
3	N1	Notch inhibitors ICIs: Nivolumab, pembrolizumab	PDL1 status
4	EZB (MYC+, MYC-)	EZH2 inhibitor: Tazemetostat BCL2i: Venetoclax HDACi: Vorinostat, panobinostat, mocetinostat AKTi: MK-2206 PI3Ki: Pylaralisib, buparlisib, CUDC-907 BETi: Birabresib mTORi: Temsirolimus, everolimus	<i>For Panobinostat</i> Positive predictor: MEF2B mutations <i>For CUDC-907</i> Positive predictor: MYC alterations

**Abbreviations:** ABC, activated B cell-like; BCL6, B cell lymphoma 6 protein; BCR, B cell receptor; DLBCL, diffuse large B cell lymphoma; GCB, germinal center B cell-like; ICIs, immune-checkpoint inhibitors; NCI, National Cancer Institute; NA, not applicable; TLR, Toll-like receptor.