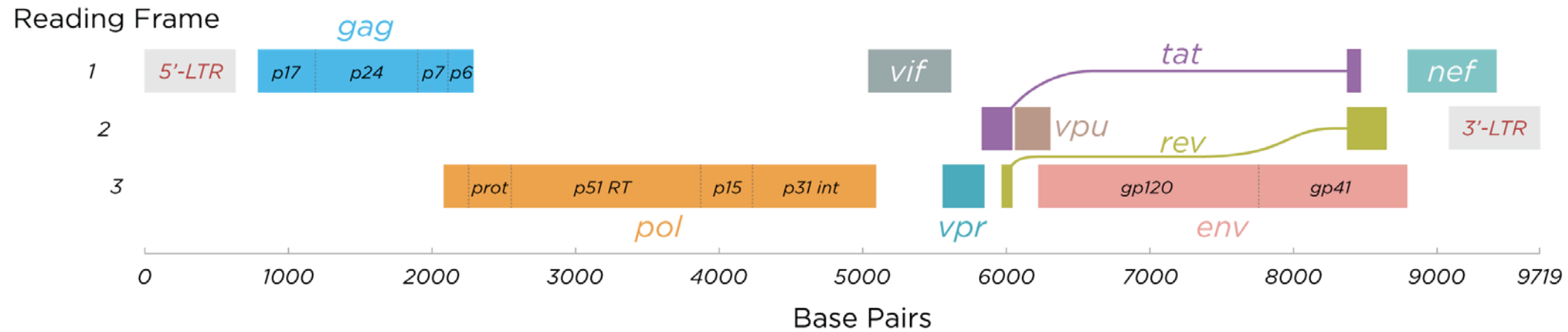


# A lymphomagenic role for HIV beyond immune suppression?

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# The HIV Genome - ~9.7 kb



**Table 1. Categories of HIV-associated lymphomas**

BL-plasmacytoid

Primary central nervous system lymphoma

DLBCL, IB-plasmacytoid

DLBCL, CB

Plasmablastic lymphoma of the oral cavity type

PEL and its solid variant

Classic PEL in the absence of tumor masses

Solid PEL with serous effusion

Solid PEL without serous effusion

MCD-associated large cell lymphoma

Hodgkin lymphoma

Other histotypes (rare)

Lymphomas of the marginal zone

Unclassifiable lymphomas with features intermediate between BL and DLBCL

Polymorphic B-cell lymphoma (PTLD-like)

PTLD, posttransplant lymphoproliferative disorder.

**Table 2. Lymphoid proliferations in people with HIV/AIDS associated with infection by other viral agents**

	HIV	EBV (Latency)	KSHV
Hodgkin lymphoma	+	+ (II)	—
BL-plasmacytoid	+	-/+ (I)	—
DLBCL-IBL plasmacytoid	+	+ (II)	—
PEL and its solid variants	+	+ (I)	+
PBL of the oral cavity type	+	+/- (I)	—
MCD-associated LBCL	+	—	+
MCD	+	—	+

+, positive in 100% of cases; —, negative in 100% of cases; -/+, positive in less than 50% of cases; +/-, positive in more than 50% of cases; IBL, immunoblastic lymphoma.

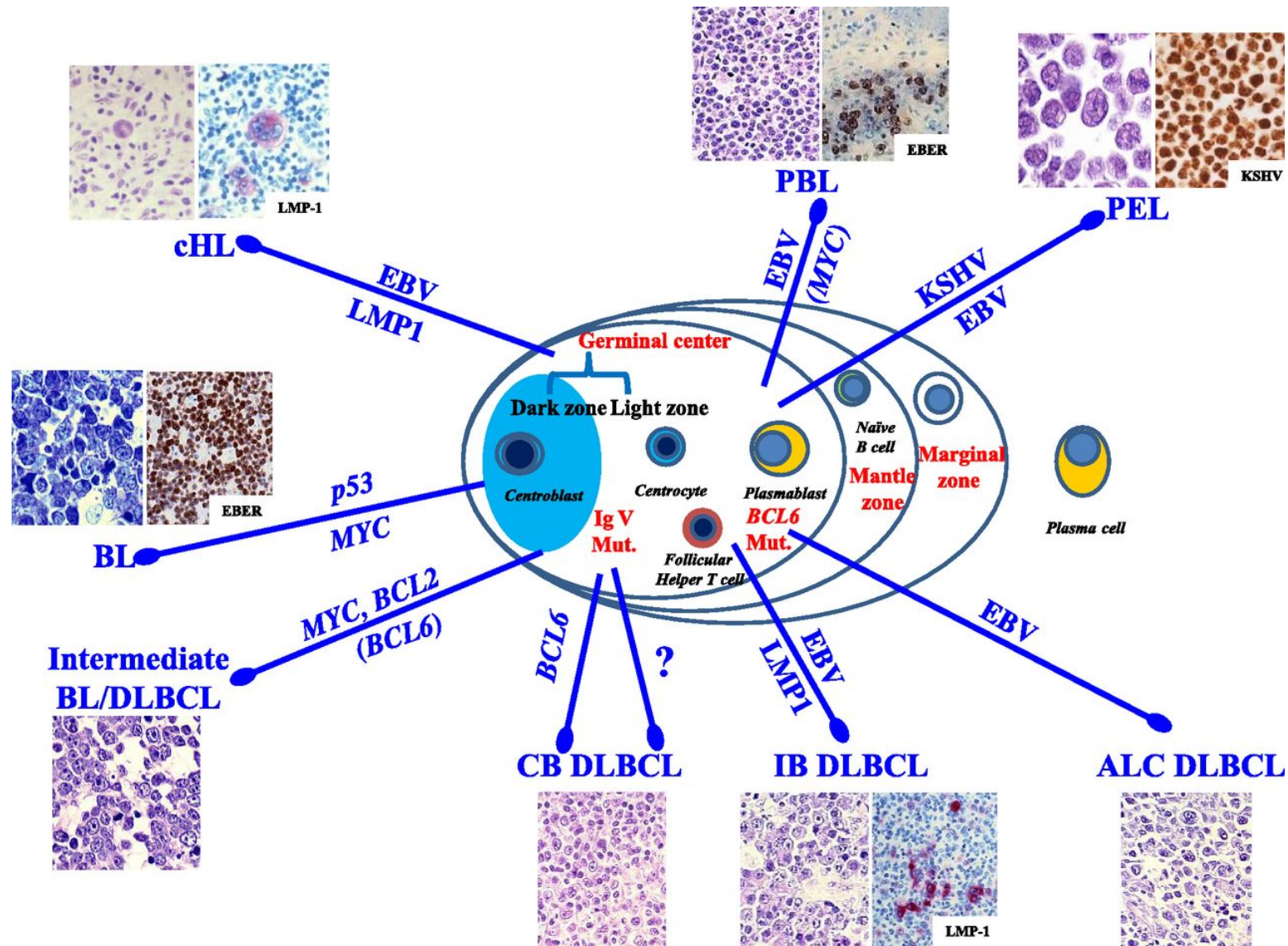
**Table 3. Germinal center- or postgerminal center-derived lymphomas in HIV-infected individuals: immunodeficiency level, phenotypic features, and genetic abnormalities**

	Germinal center		Postgerminal center		
		Germinal center B-cell type	Activated B-cell type	Plasmablastic type/plasma cell type	
Histotype	BL	DLBCL-CB	DLBCL-IB	PBL	PEL
<b>Phenotypic features</b>					
BCL-6	+	+	—	—	—
MUM1	—	—	+	+	+
CD138	—	—	-/+	+/-	+
<b>Genetic abnormalities</b>					
<i>BCL-2</i>	—	—	30%	20%	—
<i>BCL-6</i>	100%	>75%	—	<10%	—
<i>TP53</i>	50-60%	Rare	—	—	—
<i>MYC</i>	100%	0-50%	—	40%	—

Immunodeficiency increases from mild (left) to severe (right) across the table.  
 —, absent; +, present; +/-, usually present; -/+, usually absent.



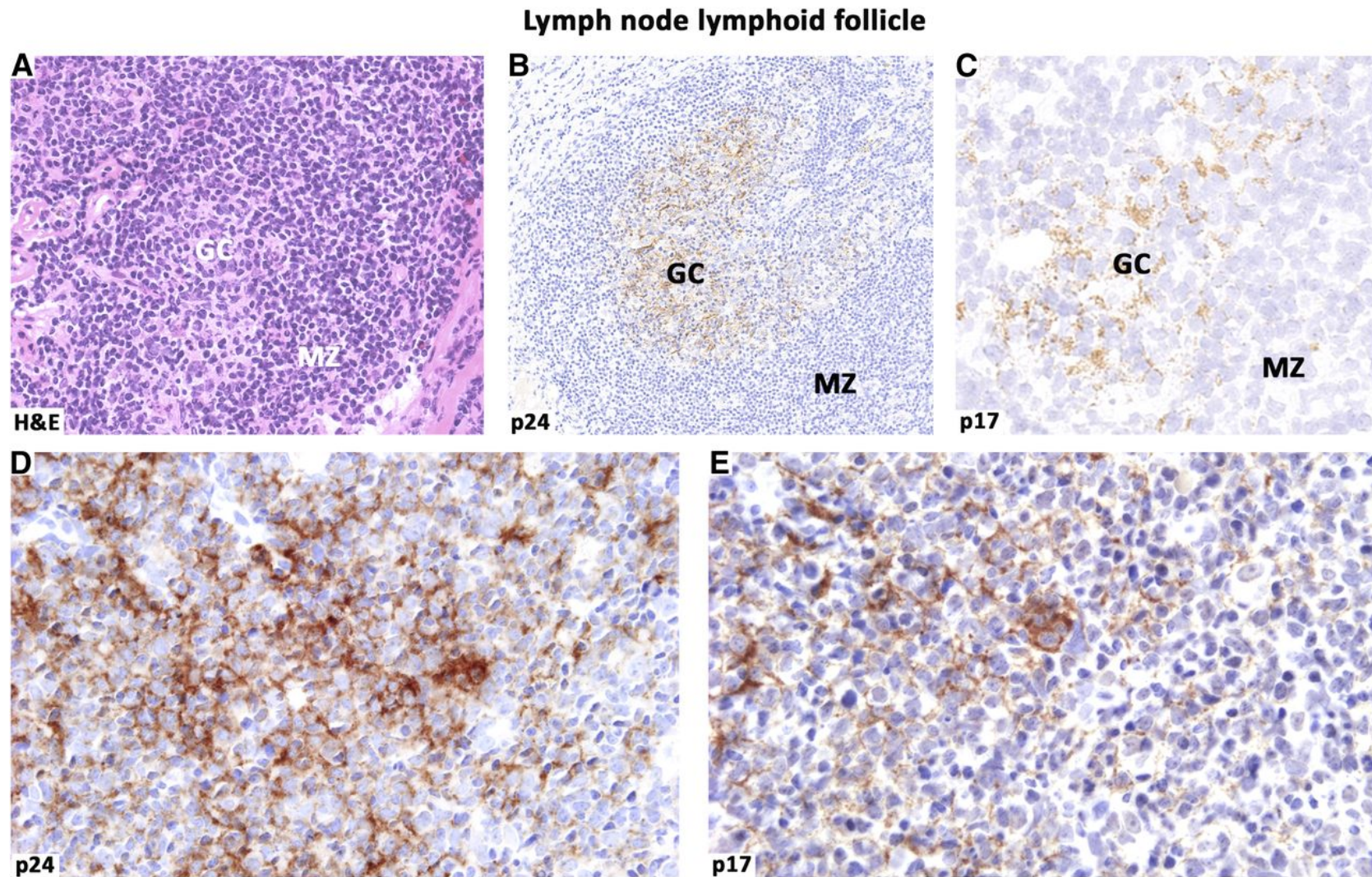
# Main viral and molecular pathogenic pathways



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# HIV-released proteins within lymphoid follicles

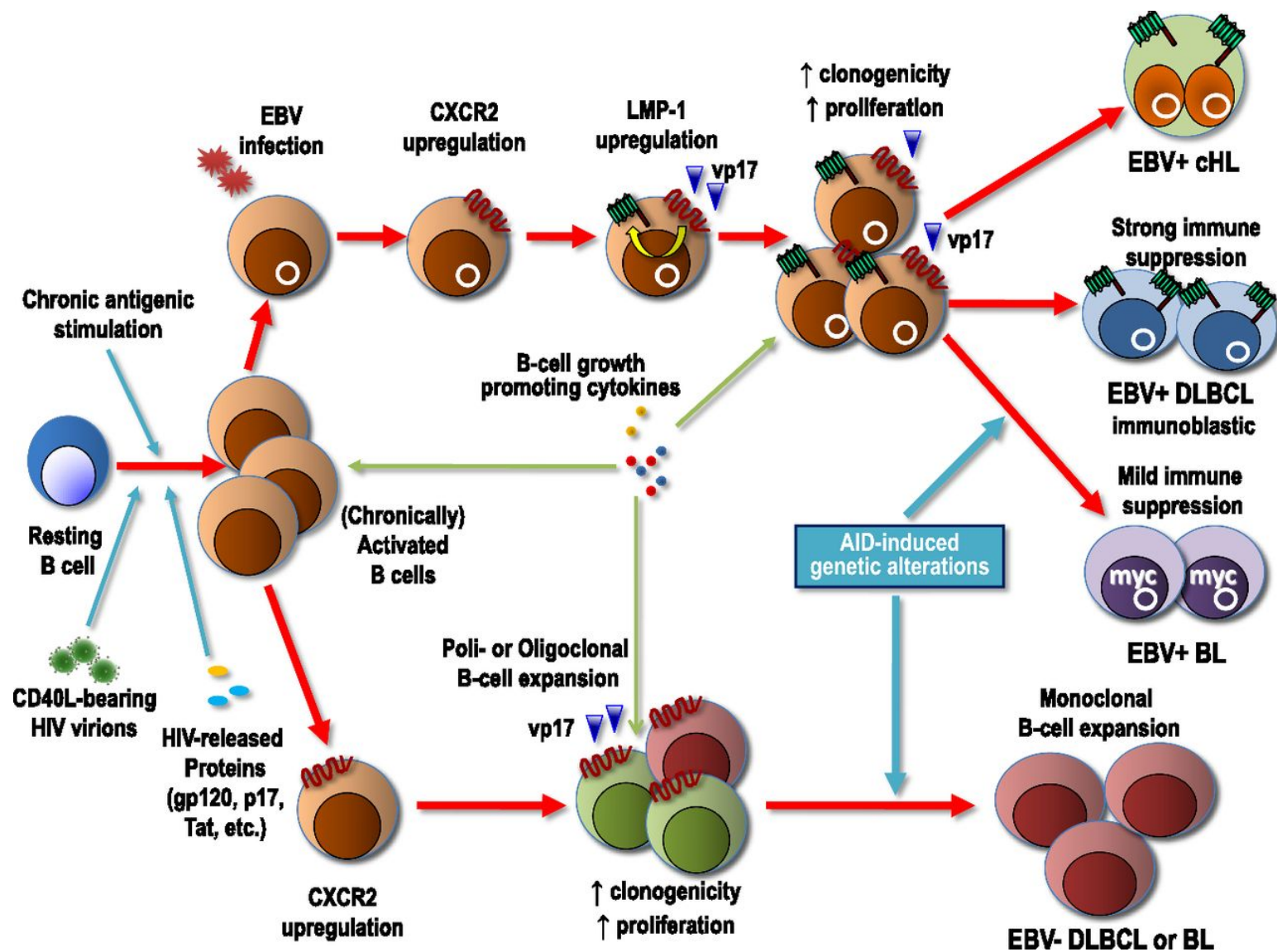


## Nasopharyngeal lymphoid follicle

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# Proposed model of the pathogenesis of EBV-associated and EBV-unrelated lymphomas of HIV-infected patients



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