Ublituximab, a Novel Anti-CD20 Monoclonal Antibody, Demonstrates Activity in Rituximab-sensitive and Rituximab-resistant B-cells Non-Hodgkin Lymphoma (B-NHL) Pre-clinical in vitro and in vivo Models

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Abstract

Ublituximab induced higher levels of ADCC than rituximab in RR and ALCR B-cell NHL cell lines

Ublituximab induced lower levels of ADCC than rituximab in VV and VV-A2 B-cell NHL cell lines

Ublituximab and rituximab had no impact on the cell cycle in various lymphoma cell lines

Ublituximab and rituximab reduced viability by a similar degree in MCL cell lines

Ublituximab and rituximab did not induce apoptosis in various DLBCL cell lines

Ublituximab and rituximab had similar effects on survival in human B-cell lymphoma SCID mice

Conclusions

- Ublituximab reduces higher antibody dependent cytotoxicity than rituximab in vitro
- Ublituximab and rituximab induce viability equally in the presence of a potent antireceptor blocking antibody
- Neither ublituximab or rituximab has significant effects on the cell cycle or apoptosis
- Ublituximab and rituximab prolong survival to an equal extent in an in vivo Burkitt's lymphoma SCID mouse model

- Ublituximab is more effective in killing complement dependent cytotoxicity in primary tumor cells than rituximab

- Research...