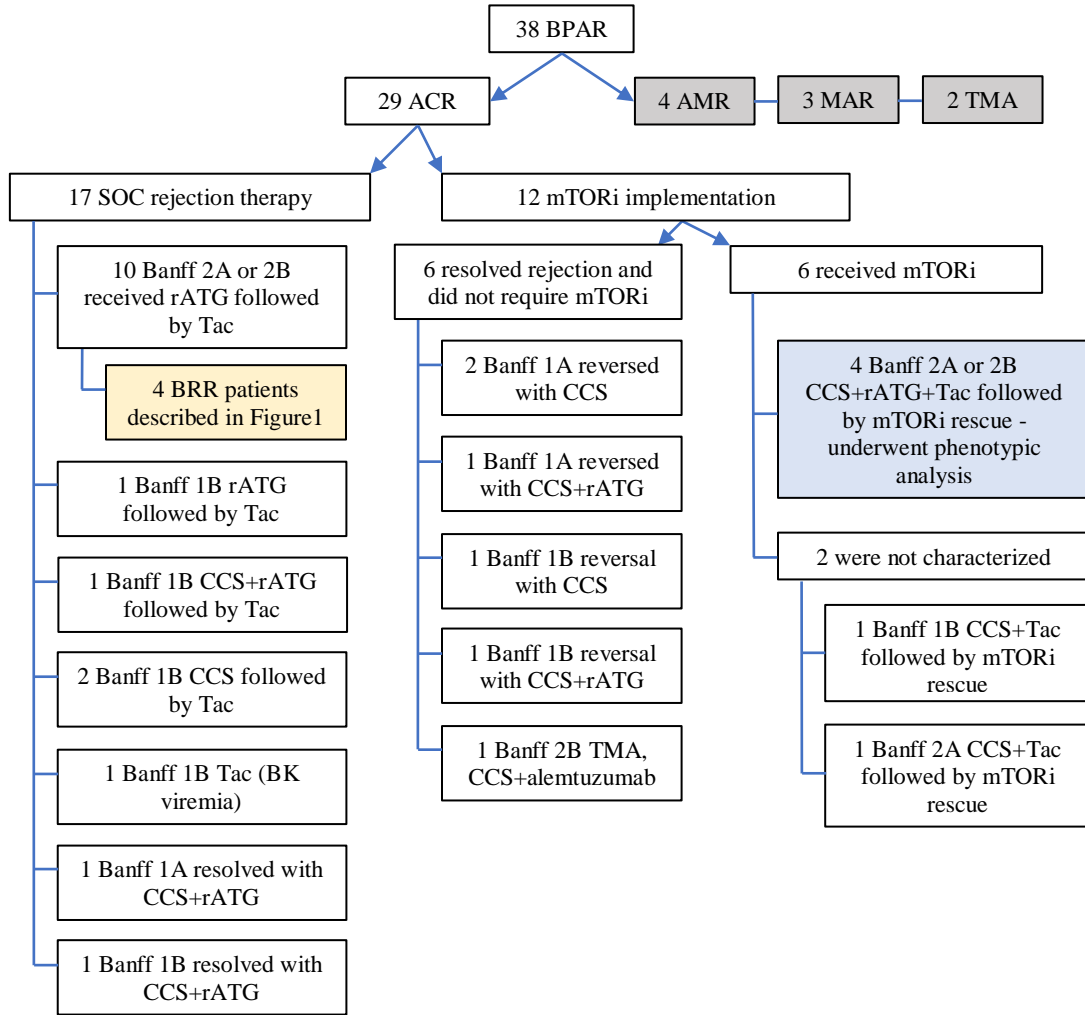


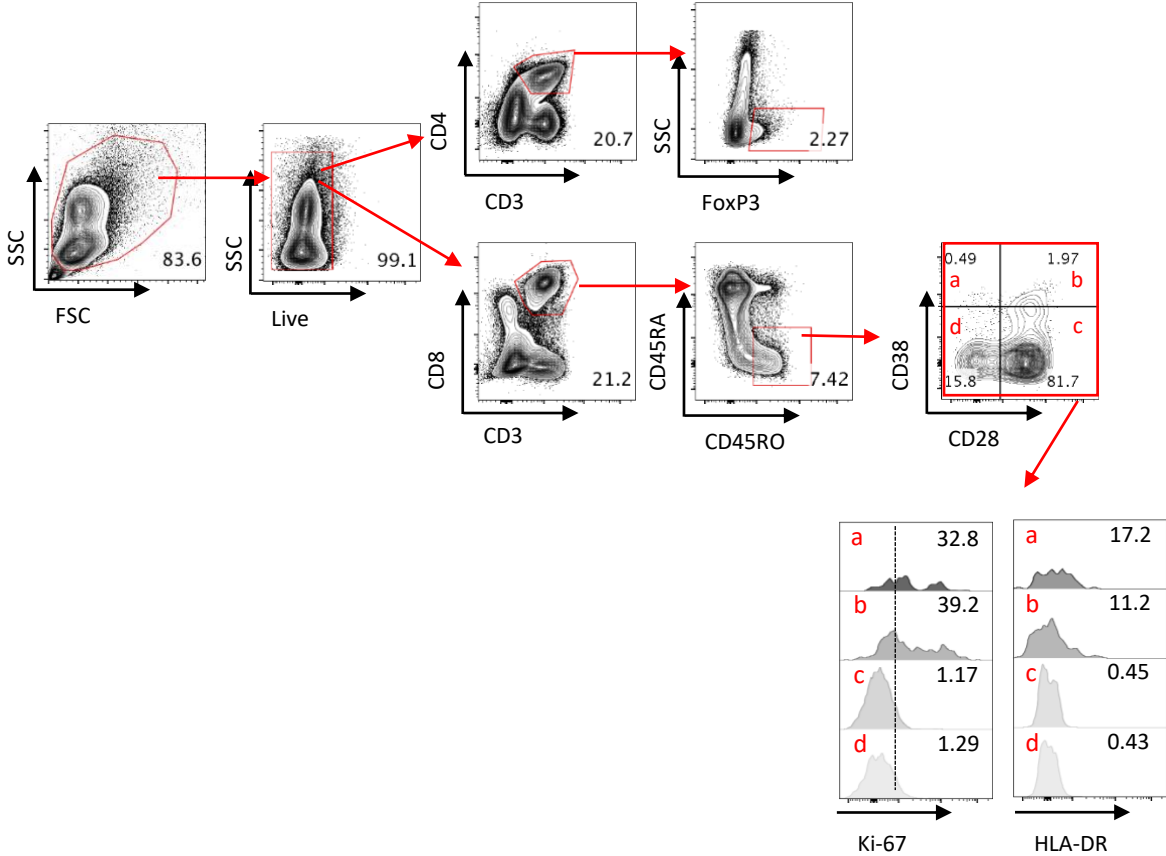
Supplemental figure 1:



Supplemental figure 1: Biopsy proven acute rejection episodes in patients that received belatacept in the BEST trial. Prior to implementation of mTORi rescue protocol, 14 out of 17 (82.3%) patients with BRR ACR received rATG rejection therapy followed by TAC but failed to resolve. Four of these patients are described in Figure 1 A-D (yellow box). Following implementation of mTORi rescue protocol, 6 patients were treated with mTORi, most of whom had Banff 2A or 2B rejection with inadequate response to CCS+rATG+TAC. Four of these patients are described on Figure 5 A-D (blue box). Gray boxes highlight patients excluded due to AMR, MAR, or TMA.

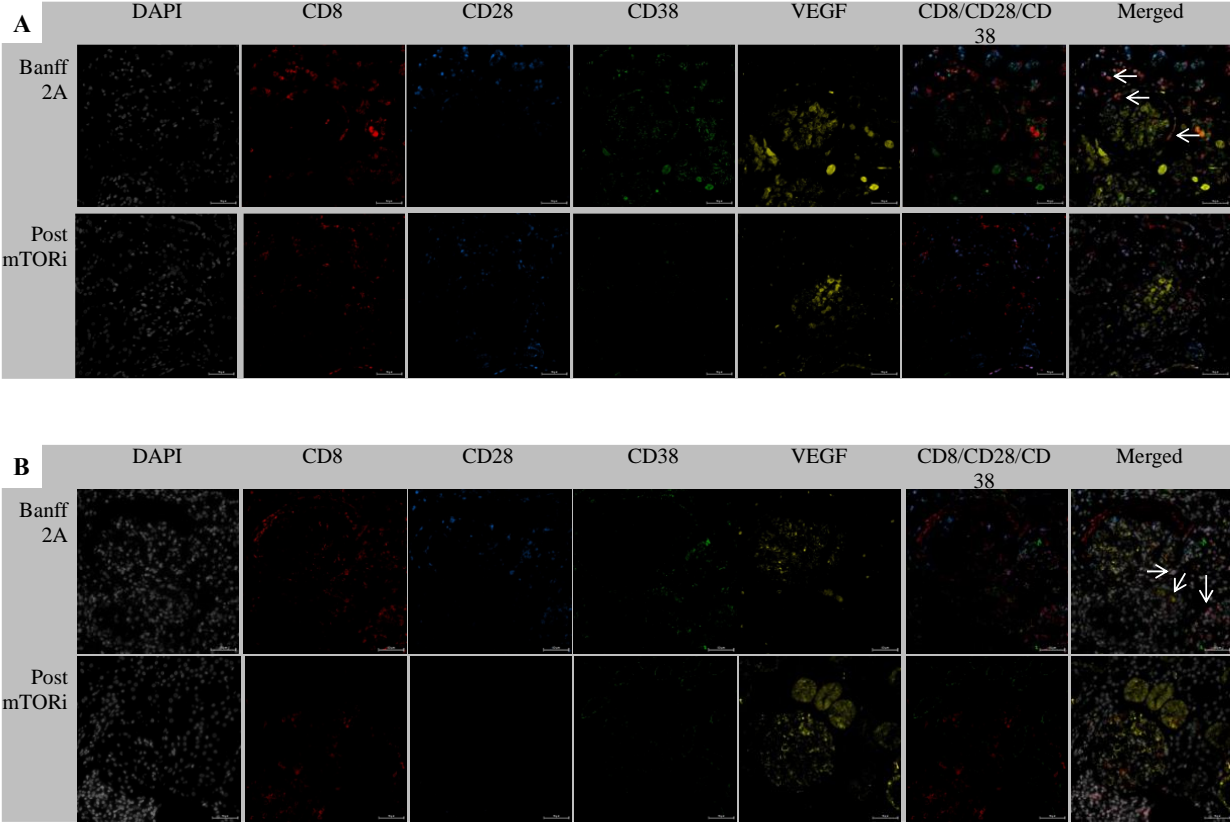
BPAR, biopsy proven acute rejection; ACR, acute rejection; AMR, antibody mediated rejection; MAR, mixed acute rejection; TMA, thrombotic microangiopathy; mTORi, mammalian target or rapamycin inhibitor; BRR, belatacept resistant rejection; CCS, corticosteroids; rATG, rabbit anti-thymocyte globulin; TAC, tacrolimus.

Supplemental figure 2.



Supplemental figure 2. Gating strategy utilized for mechanistic studies. CD8⁺ effector memory T cells are defined as CD8⁺ CD45RO⁺. We identified regulatory T cells by FoxP3⁺ CD4⁺. We utilized Ki-67 as a marker of proliferation and HLA-DR as a marker of activation.

Supplemental figure 3.



Supplemental figure 3. Presence of CD28⁻ CD8⁺ effector memory T cells in graft at time of rejection. **A-B)** Expression of CD8 and CD38 correlates by immunofluorescence in the graft at the moment of rejection in two different patients while no colocalization is observed for CD28. Correlation is decreased after mTORi treatment. VEGF, vascular endothelial growth factor.