

CARDIOVASCULAR

- CMV (cytomegalovirus) exposure and infection increased the incidence of post-transplant cardiovascular events the effect of CMV seems to be limited to ATG-treated patients.
- ATG-induced lymphocyte activation may promote atherosclerosis and that this effect could be amplified by CMV infection
- Randomized studies proved **ATG to be superior to anti-CD25 mAb** in renal transplant recipients with **high immunologic risk**.
 - In such patients, benefits likely overcome the increase in the risk of CVEs. However, in our view, these patients should be considered at very high risk of cardiovascular complications and taken over in this way.
- By contrast, the superiority of ATG in low-to-moderate immunologic risk patients is more questionable.
 - Indeed, whereas the rate of acute rejection is not reduced by ATG use in those patients, infections are more frequent leading to a worse benefit/risk ratio. [1]
 - HYPOTENSION may indicate anaphylaxis. Stop infusion of ATGAM and stabilize blood pressure with vasopressor and titrate according to blood pressure. [2]

[1] –Ducloux D, Courivaud C, Bamoulid J, Crepin T, Chalopin JM, Tiberghien P, Saas P. Polyclonal antithymoc globulin and cardiovascular disease in kidney transplant recipients. J Am Soc Nephrol. 2014 Jun;25(6):1349-56 10.1681/ASN.2013060663. Epub 2014 Feb 7. PMID: 24511120; PMCID: PMC4033372. https://jasn.asnjournals.org/content/jnephrol/25/6/1349.full.pdf?with-ds=yes

[2] - Atgam ® (lymphocyte immune globulin, anti-thymocyte globulin [equine] sterile solution (n.d.). https://www.fda.gov/media/78206/download