

## SUPPLEMENTAL TABLE

**Table S1. Studies of Photopheresis in Heart Transplantation**

Study Design	N	Type	Outcome	Ref.*
International, Multicenter, Double-Blind, Randomized control trial	60	Prophylaxis	<ul style="list-style-type: none"> <li>• Reduction in ARE (1.44 vs. 0.91 per patient, <math>p = .04</math>).</li> <li>• Fewer patients had <math>\geq 2</math> ARE (<math>p = .02</math>).</li> <li>• Reduction in CMV infection (<math>p = .04</math>).</li> </ul>	1s
Prospective, Interventional study	15	Prophylaxis	<ul style="list-style-type: none"> <li>• ECP groups had fewer ARE at follow-up (<math>p = .007</math>).</li> <li>• ECP groups had fewer infections (<math>p = .026</math>).</li> </ul>	2s
Prospective, Randomized study	23	Prophylaxis for AMR and CAV	<ul style="list-style-type: none"> <li>• Reduction in PRA at 3–4 months (<math>p &lt; .03</math>) and 5–6 mos. (<math>p &lt; .05</math>) post-HT.</li> <li>• Coronary artery thickness at 1 and 2 years was reduced (<math>p &lt; .04</math>) and (<math>p &lt; .02</math>).</li> </ul>	3s
Case series	16	Prophylaxis, high-risk groups	<ul style="list-style-type: none"> <li>• 15 patients were alive and with good graft function at follow-up, 8.3 mos post-HT.</li> <li>• 12.5% of patients had EMB with evidence of ACR.</li> <li>• No evidence of AMR after treatment.</li> <li>• Infection complications were 24%.</li> </ul>	4s
Prospective study	343	Prophylaxis, recurrent, rejection with HC	<ul style="list-style-type: none"> <li>• Rejection risk was reduced after 3 mos of ECP (<math>p = .04</math>).</li> <li>• Reduction in risk for HC rejection or rejection death (<math>p = .006</math>)</li> </ul>	5s
Retrospective case series	20	Prophylaxis, Recurrent ACR, Persistent ACR, AMR +HC	<ul style="list-style-type: none"> <li>• Survival at 1 and 3 years was 53% and 84%.</li> <li>• 11 deaths at 3.1 years.</li> </ul>	6s
Prospective randomized study	16	ACR	<ul style="list-style-type: none"> <li>• ECP may be as effective as steroids for the treatment of grades 2, 3A, and 3B ACR</li> </ul>	7s
Case series	7	ACR	<ul style="list-style-type: none"> <li>• 8 of 9 ARE were reversed with ECP as assessed by EMB 7 days after treatment.</li> </ul>	8s
Case series	14	ACR	<ul style="list-style-type: none"> <li>• Improvement in EMB following treatment with CS vs. ECP—100% and 56%, respectively (<math>p &lt; .005</math>).</li> <li>• Interstitial infiltrates of <math>&gt;90\%</math> T lymphocytes were greater in percentage in the ECP group (<math>p &lt; .005</math>).</li> </ul>	9s

Case series	6	Recurrent ACR	<ul style="list-style-type: none"> <li>• Decrease in moderate ARE per month (<math>p &lt; .02</math>).</li> </ul>	10s
Case series $\beta$	11	Recurrent ACR	<ul style="list-style-type: none"> <li>• EMB with Grade 0/1A rejection increased from 46% to 72%.</li> <li>• EMB with Grades 3A/3B decreased from 42% to 18%.</li> </ul>	11s
Case series	8	Recurrent ACR, Persistent ACR, Mixed rejection with HC	<ul style="list-style-type: none"> <li>• Low response rate of 37.5%.</li> <li>• 3 patients had negative biopsies at the end of treatment.</li> <li>• No statistically significant reduction in overall survival at 26 mos. follow-up.</li> <li>• Two patients died at 6 and 21 mos.</li> </ul>	12s
Retrospective study	235	ACR, AMR or ATR	<ul style="list-style-type: none"> <li>• Lower 5-year survival in the ECP group (40% vs. 79%, <math>p = .0001</math>).</li> <li>• 6 patients died within 5 years.</li> <li>• No difference in 5-year freedom from CAV, NF-MACE, ATR, ACR, and AMR.</li> </ul>	13s
Case series	4	AMR	<ul style="list-style-type: none"> <li>• ARE were less common at follow-up.</li> <li>• Reduction in PRA.</li> </ul>	14s
Case series	7	Chronic LV dysfunction and AMR	<ul style="list-style-type: none"> <li>• Improvement in baseline echo (<math>38 \pm 14\% - 51 \pm 8\%</math>, <math>p = .048</math>).</li> <li>• Decrease in baseline mean peak PRA (<math>83 \pm 17\% - 38 \pm 42\%</math>, <math>p = .022</math>).</li> <li>• Decrease in inflammatory cytokine TGF-B1 (<math>p = .009</math>).</li> </ul>	15s
Case series	13	Chronic LV dysfunction and/or AMR	<ul style="list-style-type: none"> <li>• Reduction in 6 patients with IL-6 (<math>p = .03</math>) and 5 patients with IFN-<math>\gamma</math> (<math>p = .06</math>).</li> <li>• 6 patients had improved EF (<math>35 \pm 20 - 45 \pm 23\%</math>)(<math>p = .004</math>)</li> <li>• Only 4 patients showed a reduction in PRA &gt; 20%.</li> </ul>	16s

ACR, acute cellular rejection; AMR, antibody-mediated rejection; ARE, acute rejection episodes; ATR, any treated rejection; CAV—coronary artery vasculopathy; CMV, cytomegalovirus; CS, corticosteroids; ECMO, extracorporeal membrane oxygenation; ECP, extracorporeal photopheresis; EMB, endomyocardial biopsy; HC, hemodynamic compromise; NF-MACE(myocardial infarction, congestive heart failure, percutaneous cardiac intervention, placement of pacemaker/defibrillator, stroke); PRA, panel-reactive antibodies. \*References are in the Supplementary Material

### **Supplemental References:**

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