Supplementary Index

Use of Donor-Derived-Cell-Free DNA as a Marker of Early Allograft Injury in Primary Graft Dysfunction (PGD) to Predict the Risk of Chronic Lung Allograft Dysfunction (CLAD)

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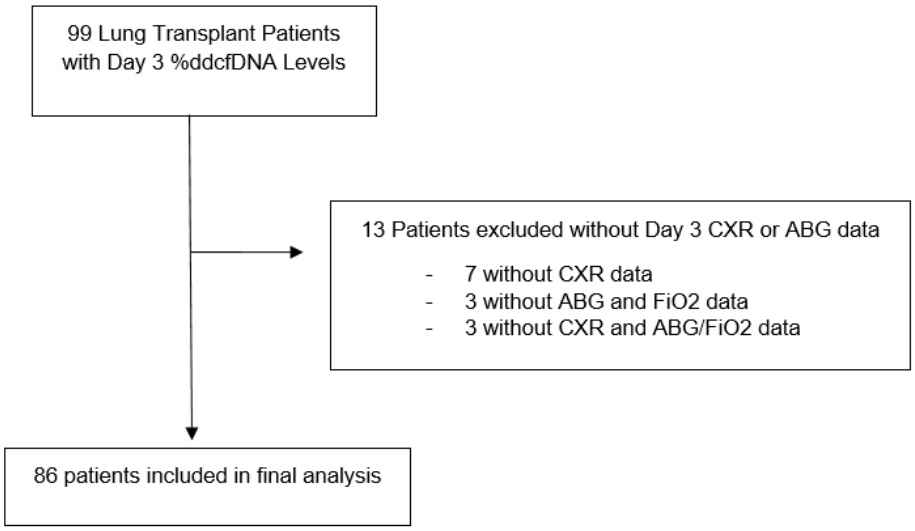
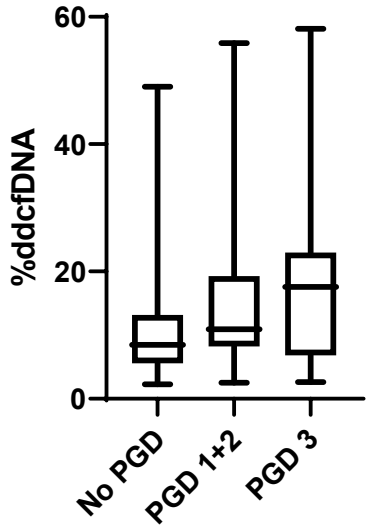


Supplementary Figure 1: Study Design. 99 patients had Day 3 %ddcfDNA results. 13 patients did not have available Day 3 CXR or ABG data and were excluded from the final analysis. 86 patients were included in the final analysis.

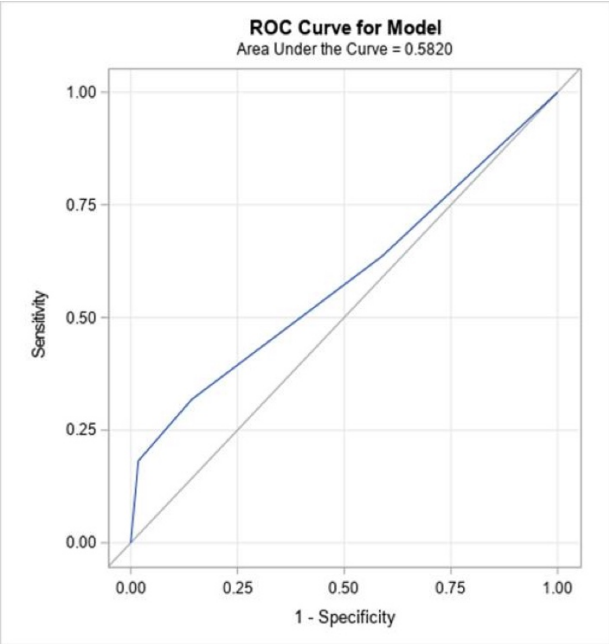


Supplementary Figure 2: Differences in Day 3 %ddcfDNA between severity grades of PGD. Results demonstrate median, interquartile range, maximum and minimum values. Non PGD vs PGD 1+2 vs PGD 3 (8.5% (5.6, 13.2) vs 10.9% (8.20, 19.3) vs 17.6% (8.1, 22.8), p = 0.03)

Supplementary Table 1: Characteristics of Patients with CLAD vs without CLAD			
	No CLAD (N=56)	**CLAD (N=22)**	**P Value**
Sex at Birth: Male Female	 23 (50%) 23 (50%)	 8 (36%) 14 (66%)	 0.43
Race: White Non-White	 52 (93%) 4 (7%)	 15 (68%) 7 (32%)	 **0.08**
Type of Transplant: Single Double	 18 (32%) 38 (68%)	 5 (23%) 17 (77%)	 0.45
Donor-Recipient Race Mismatch: Yes No	 15 (27%) 41 (73%)	 5 (33%) 15 (66%)	 0.85
PGD Yes No	 30 (49%) 26 (51%)	 11 (50%) 11 (50%)	 0.78
PGD 3 Yes No	 9 (16%) 47 (84%)	 3 (14%) 19 (86%)	 0.79

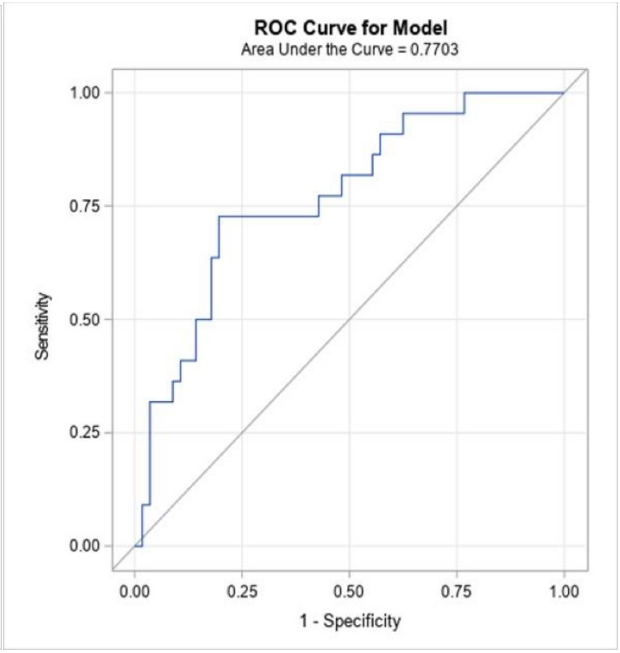
Supplementary Table 1: Characteristics of patients with CLAD and without CLAD with corresponding univariate analysis. Only Race was incorporated into the multivariate analysis.

Race and PGD



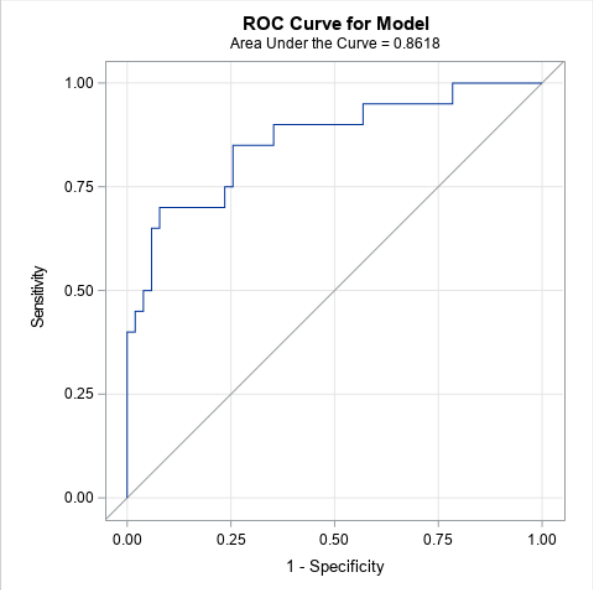
Supplementary Figure 3a

Race+ PGD+ log2(%ddcfDNA) + PGD*log2(%ddcfDNA



Supplementary Figure 3b

Race+ PGD+ ACR + Infection + log2(%ddcfDNA) + PGD*log2(%ddcfDNA



Supplementary Figure 3c

Supplementary Figure 3. (a). ROC curve of multivariable model incorporating Race and PGD as predictors of CLAD. **(b).** ROC curve of multivariable model incorporating Race and PGD in addition to %ddcfDNA. **(c). ROC curve of multivariate model incorporating Race, PGD, %ddcfDNA, Infection and Rejection.**