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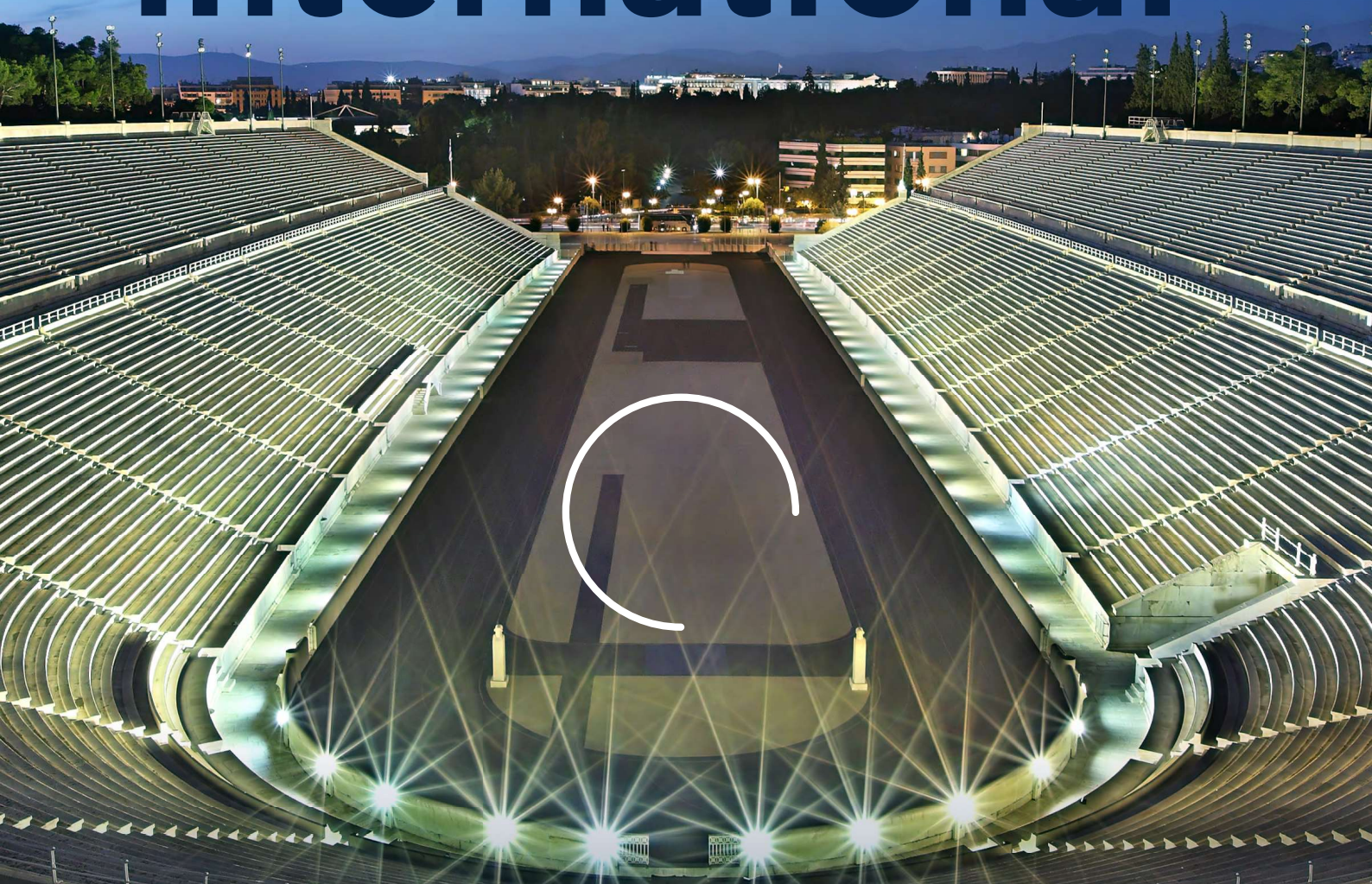

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Results: Univariate analysis demonstrated that post-transplant pseudomonas isolation, transient anti-HLA antibodies, DSA, invasive pulmonary aspergillosis (IPA) and fungal isolation (with clinical symptoms impeding diagnosis of colonization, but insufficient endoscopic/radiologic features for invasive fungal disease) were associated with increased RAS/Mixed phenotype occurrence. Multivariate analysis confirmed the association for pseudomonas isolation, transient HLA, DSA and IPA.
Conclusions: We have identified a set of risk factors associated with RAS that could be therapeutic targets in lung transplant follow-up.

Covariates		Hazard ratio	Standard error	P
PGD at 72h post-LTx				0.4364
	Grade 1	0.6498	0.2434	
	Grade 2	0.6501	0.2195	
	Grade 3	0.9993	0.3513	
Acute rejection		1.0502	0.1280	0.6915
HLA-antibodies				
	Transient	**1.5734**	**0.1861**	**0.0006**
	Perisistent	**1.4975**	**0.2296**	**0.0165**
Donor-specific-antibodies		**1.8452**	**1.8452**	**0.0070**
Pseudomonas isolation		**1.1573**	**0.0551**	**0.0068**
Non-pseudomonas isolation		1.0801	0.0392	0.0506
Invasive fungal disease				
	Invasive pulmonary aspergillosis	**1.4649**	**0.1065**	**0.0000**
	Fungal trancheobronchitis or bronchial anastomotic infection	1.3278	0.2160	0.1063
Non-invasive fungal disease				
	Colonization	1.0788	0.2241	0.7193
	No colonization	**1.2286**	**0.0664**	**0.0003**
Peripheral blood lymphocytes (10^9/L)		1.0178	0.1336	0.8936
Peripheral blood monocytes (109/L)		1.3465	0.5533	0.4749

BOS6_13 EXTRACORPOREAL PHOTOPHORESIS IN CHRONIC LUNG ALLOGRAFT DYSFUNCTION. SINGLE CENTER EXPERIENCE

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Background: Extracorporeal photopheresis (ECP) is a procedure that involves the apheresis and collection of the leukocyte-enriched blood, which is exposed to ultraviolet light in the presence of 8-methoxypsoralen and then, reinfused to the patient. This results in lymphocyte apoptosis and induction of regulatory T-cells. ECP is an accepted therapy in lung transplant recipients (LT) for treatment of chronic lung allograft rejection (CLAD).
Methods: We performed a retrospective study of all lung transplant recipients who were treated with ECP for CLAD at Hospital la Fe, Valencia (Spain) from July 2017 to January 2022. ECP treatment was performed with off-line methods and processing one volemia. Treatments were performed weekly (1st mo.), quarterly (till 6 mo.) and then, monthly (6-12 mo.). A positive response to ECP was considered change in the mean decrease of FEV1 6 months after ECP, compared with 6 months prior to ECP. A small group of patients receive ECP due to recurrent acute rejection (RAR) (n=03). Means (paired Student's t-test) and mortality (Kaplan-meier) were analysed with SPSS 20.0 software.
Results: Thirty-eight patients received ECP for CLAD (28 bilateral LT, 9 single-LT, 1 heart-lung transplant; 27 male & 11 female), with median age of 47 years (range 19-71). CLAD stage at ECP initiation was CLAD 1-2 52'6%, CLAD 3-4 28%. CLAD subtype obstructive 32'3%, restrictive 23'1%, mixed 35'9%. Immunosuppression at ECP start consisted of tacrolimus and everolimus in most patients (60.5%). Median 6-month decline of FEV1 prior and after to ECP was 386mL and 165mL, respectively (P= 0.028). The slope decreased more when the underlying disease was an interstitial lung disease (ILD) (309mL and 35mL, respectively (P= 0.001). At the time of this evaluation, 10 (26.3%) patients have died (3/17 ILD, 2/8 COPD and 4/10 cystic fibrosis) and 2 (5.3%) have received re-transplant. Of this group, 45.5% had CLAD 3 or 4 prior to ECP. Patients who receive ECP due to RAR did not relapse. There were no major adverse events related to ECP.
Conclusions: ECP treatment is associated with a decrease in the mean decline in FEV1 in progressive CLAD patients. ILD-LT recipients might respond more than others. Advanced stage of CLAD at the start of ECP implied more mortality. RAR patients responded. ECP was proved as a safety alternative for LT recipients.

BOS6_14 EVEROLIMUS IN LUNG TRANSPLANT RECIPIENTS FOR CLAD PREVENTION: A REAL LIFE EXPERIENCE

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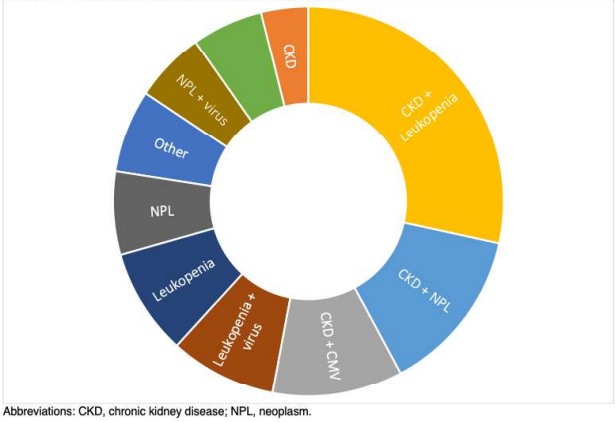
Background: We hereby report our real – life experience with everolimus (EVE) in lung transplant (LuTx) recipients as a means to prevent chronic lung allograft dysfunction (CLAD); we also aimed to evaluate the safety of this drug in this setting.
Methods: This was a retrospective study including all adult patients who underwent LuTx from January 2015 to December 2022, received regular outpatient follow up for at least 12 months from LuTx and were administered a triple combination immunosuppressive regimen, consisting of corticosteroids, tacrolimus and an antiproliferative agent. Exclusion criteria were: retransplant and administration of everolimus as treatment for CLAD. Patients were divided into two groups: those receiving everolimus and the others (thus receiving azathioprine or mycophenolate).
Results: 139 patients were considered, 46 receiving EVE. Details on baseline characteristics of our population and comparisons between the two groups can be found in table 1; of note, no significant difference was found. With regard to the reasons for EVE administration, details can be found on image 1; it should be noted that three quarters of these patients (35, 76%) simultaneously presented more than one indication for this treatment. Median time for EVE introduction was 14 (9, 24) months from LuTx. As for relevant side effects related to EVE, we observed: proteinuria in 4 (9%) patients, thrombotic events in 2 (4%), edema in 4 (9%), organizing pneumonia (OP) in 1 (2%), major infections in 12 (26%) and stomatitis in 1 (2%). After 6 months of treatment with EVE, 4 (9%) patients presented a worsening e-GFR of at least 10 mL/min (median Delta eGFR 2 (-2; 10) mL/min), whilst 11 (24%) patients experienced a FEV1 decline of at least 200 mL (median Delta FEV1 0 (-200; +180) mL). Finally, everolimus was discontinued in 5 (11%) patients: 3 for recurrent infections; 1 for pulmonary toxicity (OP) and 1 for edema, proteinuria and worsening kidney disease.
Conclusions: In light of currently available scientific evidence and based on our data, everolimus seems as effective as other antiproliferative agents in preventing CLAD in LuTx recipients, especially in those who may need a strategy to minimize nephrotoxicity and/or myelotoxicity without compromising immunosuppressive efficacy. Safety profile proved to be acceptable.

Table 1

		General population (139 pts)	Everolimus (46 pts)	Other IST regimens (96 pts)	p value
Sex (females)		72 (52%)	24 (52%)	48 (52%)	0,76
Age at LuTx (years)		40 (28; 55)	36 (28; 52)	42 (28; 58)	0,47
Bilateral LuTx		134 (96%)	43 (94%)	91 (98%)	0,20
Indication for LuTx	CF	76 (55%)	29 (68%)	47 (51%)	0,10
	ILD	40 (29%)	7 (15%)	33 (36%)	
	COPD	13 (9%)	6 (13%)	7 (8%)	
	Other	10 (7%)	4 (9%)	6 (7%)	
CLAD (incidence of)		37 (27%)	13 (28%)	24 (26%)	0,45
	BOS	22 (16%)	8 (17%)	14 (15%)	
	RAS	5 (4%)	2 (4%)	3 (4%)	
	Mista	10 (7%)	3 (7%)	7 (8%)	
CLAD-free survival (months)		45 (41; 49)	44 (38; 49)	46 (41; 50)	0,46
Survival (months)		76 (71; 81)	77 (71; 84)	74 (68; 81)	0,27

Abbreviations: CF, cystic fibrosis; CLAD, chronic lung allograft dysfunction; COPD, chronic obstructive pulmonary disease; ILD, interstitial lung disease; LuTx, lung transplantation; pts, patients.

Image 1 – Reasons for everolimus introduction



Abbreviations: CKD, chronic kidney disease; NPL, neoplasm.