Table 1. Pharmacokinetics and GI score with MMF in combination with PPI / HRB

	MMF	MMF+ R	MMF + E	p
AUC	67.97 (62.73, 73.20)	53.04 (44.80, 61.27)	45.69 (41.10, 50.28)	<0.001*
mean (95% CI)				
T- MAX	42.00 (33.60, 50.40)	46.50 (32.48, 60.52)	79.50 (58.99, 100.01)	<0.001*
mean (95% CI)				
C-MAX	29.61(26.74, 32.48)	15.14 (11.32, 18.97)	12.62 (10.58, 14.66)	<0.001*
mean (95% CI)				
Mean GI score	0.28 (0.15,0.40)	0.19 (0.09, 0.30)	0.14 (0.06,0.23)	0.009
mean (95% CI)				

AUC, area under curve Mycophenolic acid; C-MAX, maximum concentration of MPA in 12 hours following MMF; CI confidence interval; Mean GI score, UCLA Scleroderma Clinical Trial Consortium GIT 2.0 scoring; MMF, mycophenolate mofetil; MMF+E, mycophenolate mofetil + esomeprazole; MMF+R, mycophenolate mofetil+ ranitidine; *p value < 0.05 considered as significant

Conclusion: As co administration of PPI or HRB can significantly reduce the bio-availability of MMF in patients with systemic sclerosis. To avoid therapeutic failure of MMF drug level monitoring is essential when these agents re prescribed with MMF.

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POS0890

MACROVASCULAR DYSFUNCTION AND ITS CLINICAL IMPLICATION IN SYSTEMIC SCLEROSIS

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Background: Even though microvascular dysfunction has been implicated in pathogenesis of scleroderma (SSc), there is minimal evidence to suggest presence of macrovascular dysfunction. The clinical implication of macrovascular dysfunction in SSc is unknown. Moreover, data on the correlation between dysfunction in small and large blood vessel is inconclusive. [1-2]

Objectives: To study the correlation between macrovascular dysfunction as assessed by percent change in flow mediated vasodilation (FMD) of brachial artery and microvascular dysfunction as assessed by nail fold capillaroscopy (NFC) findings in SSc. To assess the clinical impact of macrovascular dysfunction.

Methods: This cross-sectional comparative study enrolled patients with SSc and age and gender matched healthy controls. FMD change was calculated using standard USG probe of 5 to 6 MHz in right brachial diameter from the average of 3 consecutive end diastolic frames. NFC was performed using portable nail fold capillary microscope at 800X magnification. Clinical features of SSc were compared between SSc patients with and without macrovascular dysfunction.

Results: This study enrolled 59 SSc patients including 29 (49.2%) diffuse, 20 (20.4%) limited, 08 (10.2%) sine SSc and 2 patients (3.4%) with myositis overlap. SSc patients had significantly (p<0.0001) lower % FMD change compared to healthy controls. NFC showed significantly higher architecture distortion (p<0.0001), loss of capillaries (p<0.0001) and abnormal capillaries (p<0.0001). There was no correlation between FMD change and capillary density (p=0.381), avascular area (p=0.266) and abnormal capillaries (p=0.899). None of the clinical features like pulmonary hypertension, digital ulcer burden, acro-osteolysis and auto amputation were different between SSc with and without macrovascular dysfunction.

Conclusion: Macrovascular dysfunction in SSc is substantial and it seems to be independent of the microvascular dysfunction. The clinical implications of macrovascular dysfunction are yet to be identified.

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Table 1. Comparison of various parameters between the SSc patients with healthy controls.

Parameter	Frequency (percentage)/median (interquartile range)	
	SSc patients (n=59)	Healthy controls (n=64)
Demographic details		
Age in years	38 (27-46)	36.5 (28.25-42)
Gender		
Male	03 (5.1%)	03 (4.7%)
Female	56 (95.1%)	61 (95.3%)
FMD findings		
FMD % change*	4.54 (3.13-8.82)	10.30 (8.33-13.16)
NFC findings		
Number of capillaries*	51 (38-63)	121 (113-128)
Average capillary density*	3.19 (2.38-3.94)	7.56 (7.06-8)
Disorganized architecture (%)*	37.5 (12.5-37.5)	0
U shape (%)*	50 (36.59-68.09)	85.51 (82.97 – 88.53)
Abnormal (%)*	36.11 (14.03-55.26)	0
Enlarged (%)*	10.63 (2.94-23.68)	0
Giant (%)*	21.05 (0-45.45)	0
Microhemorrhages (%)*	6.25 (0-12.5)	0
Neoangiogenesis (%)*	3.85 (0-20)	0
Avascular area (%)*	50 (31.25- 75)	0

*parameters with statistically significant (p value< 0.0001) difference among two groups. SSc: Systemic Sclerosis, FMD; flow mediated vasodilatation, NFC; nail fold capillaroscopy

Figure 1. Scatter plot showing correlation between FMD percentage change and average capillary density. (r= 0.116) (P-value - 0.381)

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POS0891

IMPROVED SURVIVAL IN SYSTEMIC SCLEROSIS PATIENTS DURING LAST DECADE: CURRENT FINDINGS AND COMPARISON WITH DIFFERENT PREVIOUS ITALIAN COHORTS

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Background: Systemic Sclerosis (SSc) is a chronic rheumatic disease characterized by an autoimmune disorder with vasculopathy that leads to an excess in collagen and other extracellular matrix proteins deposition. This process results in progressive fibrotic and vascular damage of skin and visceral organs.