

Supplementary Table 5. Role of predicted miRNAs in normal immune response and pathogenesis of other autoimmune diseases

miRNA	Expression tissue/ cell type	Documented or postulated immune function		References
		Normal immune response	Autoimmune disease	
hsa-miR-612	-	-	Located within known T1DM susceptibility loci	[1]
hsa-miR-212-5p	Small intestine	-	Upregulated in celiac disease	[2]
	CD4 ⁺ T cells	-	Upregulated in CD4 ⁺ T cells during pathogenesis of encephalomyelitis	[3]
hsa-miR-764	Primary human macrophages	Upregulated upon LPS challenge, which is correlated with autoimmune diabetes	-	[4,5]
hsa-let-7f-2-3p	PBMCs	-	Upregulated in patients with systemic lupus erythematosus	[6]
hsa-miR-892a	CD4 ⁺ T cells	Downregulated in immune response during transition to active tuberculosis	-	[7]
	Liver macrophages	Upregulated in NAFLD patients	-	[8]
	Peripheral blood	-	Upregulated in patients with rheumatoid arthritis	[9]
hsa-miR-493-5p	Pancreatic islets	-	Enriched in pancreatic islets, possibly reflecting the integrity of islets	[10]
	PBMCs	-	Expressed reliably in relapsing multiple sclerosis	[11]
hsa-miR-200c-5p	Peripheral blood	-	Upregulated in patients with inflammatory bowel disease	[12]
hsa-miR-26b-3p	Small intestine	-	Upregulated in celiac disease	[2]
hsa-miR-145-5p	PBMCs	Biomarker in diagnosis of fibromyalgia	-	[13]
	Small intestine	-	Upregulated in celiac disease	[2]
	Serum/whole blood/ PBMCs	-	Overexpressed and is a diagnostic biomarker for multiple sclerosis	[3,14]
	Plasma/T cells	-	Expression altered and is associated with development of SLE	[15,16]
	Fibroblasts	-	Downregulated and is implicated in pathogenesis of systemic sclerosis	[17]
	Monocytes	Regulation of inflammatory cytokine and pathogenesis of vasculitis	-	[18]
	Macrophages	Inhibition of macrophage-mediated inflammation	-	[19]
	Colon	-	Downregulated in ulcerative colitis of inflammatory bowel disease	[20]
hsa-miR-432-5p	Small intestine	-	Upregulated in celiac disease	[2]
	Plasma	Stimulates inflammatory responses and cytokine production by inactivating Wnt signaling pathway	-	[21]
hsa-miR-769-3p	Platelets	-	Downregulated in patients with ulcerative colitis and serves as a potential biomarker	[22]

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Supplementary Table 5. Continued

miRNA	Expression tissue/ cell type	Documented or postulated immune function		References
		Normal immune response	Autoimmune disease	
hsa-miR-127-3p	Pancreatic islets	-	Enriched in pancreatic islets, correlated with insulin mass, possibly reflecting the integrity of islets	[23,24]
	Gingiva	Downregulated in inflamed gingival tissues	-	[25]
	Macrophages	Implicated in macrophage activation upon LPS challenge, which is correlated with autoimmune diabetes	-	[26]
	PBMCs	-	Upregulated by immune thrombocytopenia	[27]
	Colonic mucosa	-	Upregulated in both ulcerative colitis and Crohn's disease of inflammatory bowel disease	[28]
	Splenocytes	-	Associated with onset of lupus in mouse model	[29]
hsa-miR-1185-2-3p	Platelets	-	Downregulated by immune thrombocytopenia	[30]

miRNA, microRNA; T1DM, type 1 diabetes mellitus; LPS, lipopolysaccharide; PBMC, peripheral blood mononuclear cell; NAFLD, non-alcoholic fatty liver disease; SLE, systemic lupus erythematosus.