

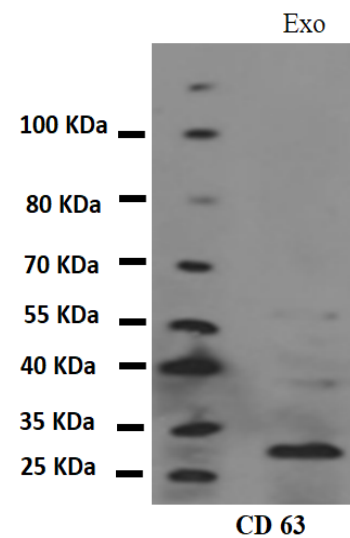
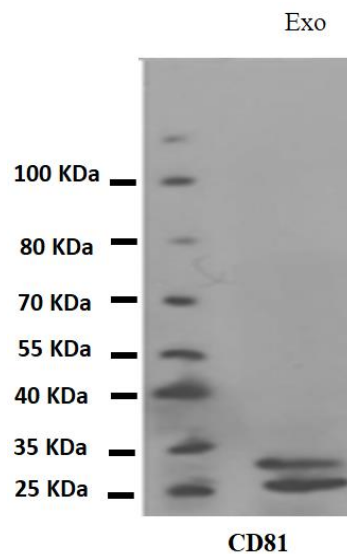
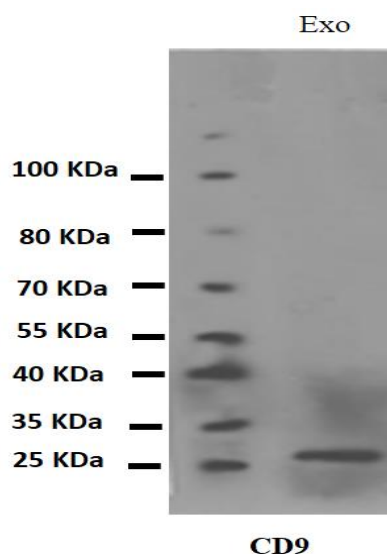
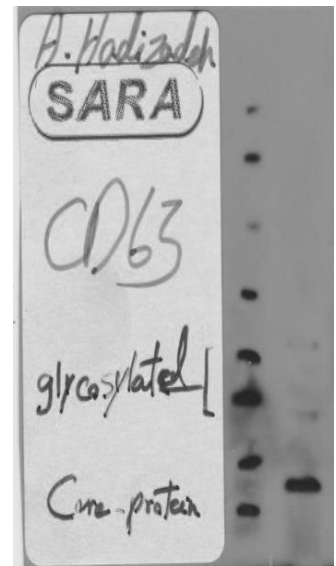
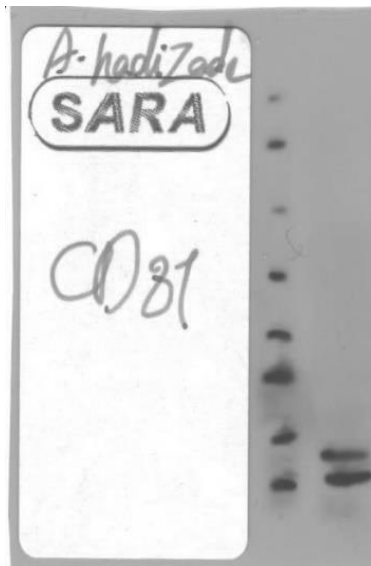
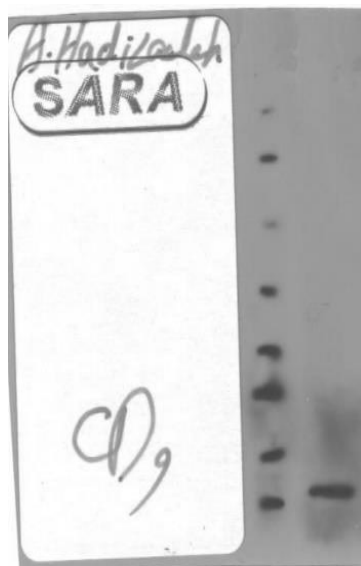
Primers sequence				
Name	Oligo Name sequence 5 - 3	BC	EC	TM
h.MMP9.F	TGG CAC CAC CAC AAC ATC	18	169	56
h.MMP9.R	GCT CCA CAG TGC GAA GG	17	164	57
h.EGF.F	GAA GGT ACT CTC GCA GGA AAT G	22	222	62
h.EGF.R	GGT TCC TTC TGT GTC AAT CCT AAA	24	224	62
h.THBS1.F	CAG AAT GTG AGG TTT GTC TTT GG	23	222	61
h.THBS1.R	GTT GTT GTC AAG GGT GAG GA	20	203	58
h.IL6.F	CCT CTT CAG AAC GAA TTG ACA AAC	24	233	62
h.IL6.R	GCT GCT TTC ACA CAT GTT ACT C	22	196	60
h.IL22.F	CAA CTT CCA GCA GCC CTA TAT C	22	203	62
h.IL22.R	ATG AGA CGA ACG TCT GTG TTG	21	208	59
h.LTF.F	CCT CCT GTC AGC TGC ATA AA	20	185	58
h.LTF.R	GAA ACC ACC ATC AAG GGT CA	20	203	58
h.actb.F	GTG GGC ATG GGT CAG AAG	18	183	58
h.actb.R	GGG TAC TTC AGG GTG AGG A	19	194	59

Table S1. Primers used in this study

			Control		Treatment		Control vs. treatment
Outcomes	Timepoints		Median [IQR] or n (%)	Within group difference p		Within group difference p	Between groups difference p
OSDI	Baseline		34.0 [24.5-35.0]		34.0 [27.8-37.0]		0.027
	2 weeks		33.5 [23.8-36.3]	0.618	19.5 [11.8-21.3]	0.012	0.011
	1 month		34.5 [26.3-36.5]	0.061	24.0 [16.5-28.0]	0.012	0.012
	3 months		38.0 [30.3-38.3]	0.011	30.5 [22.8-33.0]	0.011	0.011
Tear secretion	Baseline		3.5 [2.5-8.0]		1.5 [1.0-7.0]		0.045
	2 weeks		4.0 [1.0-8.5]	0.603	6.5 [4.0-12.0]	0.011	0.010
	1 month		4.0 [1.0-8.0]	0.459	4.5 [3.0-8.5]	0.011	0.067
	3 months		3.0 [1.0-8.5]	0.735	4.5 [1.0-8.3]	0.102	0.785
TFBUT	Baseline		4.0 [2.8-6.3]		4.4 [3.2-5.5]		0.889
	2 weeks		3.3 [2.1-6.5]	0.123	7.8 [6.5-9.3]	0.012	0.017
	1 month		3.4 [2.1-6.1]	0.161	5.6 [4.5-7.1]	0.093	0.161
	3 months		3.8 [2.5-5.2]	0.575	4.5 [2.1-5.9]	0.484	0.575
Redness	Baseline	Very mild	1 (12.5%)		1 (12.5%)		1.000
		Mild	4 (50%)		4 (50%)		
		Moderate	1 (12.5%)		1 (12.5%)		
		Severe	2 (25%)		2 (25%)		
	2 weeks	Normal	1 (12.5%)	0.008	6 (75%)	0.010	0.015
		Very mild	3 (37.5%)		2 (25%)		
		Mild	2 (25%)		0 (0%)		
		Moderate	2 (25%)		0 (0%)		
	1 month	Normal	1 (12.5%)	0.008	2 (25%)	0.008	0.102
		Very mild	3 (37.5%)		4 (50%)		
		Mild	2 (25%)		1 (12.5%)		
		Moderate	2 (25%)		1 (12.5%)		
	3 months	Normal	1 (12.5%)	0.025	1 (12.5%)	0.007	0.046
		Very mild	2 (25%)		4 (50%)		
		Mild	2 (25%)		2 (25%)		
		Moderate	3 (37.5%)		1 (12.5%)		
TMT	Baseline	Moderate	7 (87.5%)		6 (75%)		0.564
		Severe	1 (12.5%)		2 (25%)		
	2 weeks	Normal	1 (12.5%)	0.317	0 (0%)	1.000	0.655
		Moderate	3 (37.5%)		6 (75%)		
		Severe	4 (50%)		2 (25%)		
	1 month	Moderate	5 (62.5%)	0.317	4 (50%)	0.317	0.655
		Severe	3 (37.5%)		4 (50%)		
	3 months	Moderate	7 (87.5%)	1.000	8 (100%)	0.157	0.317
		Severe	1 (12.5%)		0 (0%)		
Fluorescein staining	Baseline	Very mild	1 (12.5%)		1 (12.5%)		0.564
		Mild	3 (37.5%)		4 (50%)		
		Moderate	3 (37.5%)		2 (25%)		
		Severe	1 (12.5%)		1 (12.5%)		
	2 weeks	Normal	0 (0%)	0.655	4 (50%)	0.010	0.010
		Very mild	2 (25%)		1 (12.5%)		

		Mild	2 (25%)		3 (37.5%)		
		Moderate	3 (37.5%)		0 (0%)		
		Severe	1 (12.5%)		0 (0%)		
	1 month	Normal	0 (0%)	0.655	4 (50%)	0.023	0.026
		Very mild	1 (12.5%)		1 (12.5%)		
		Mild	3 (37.5%)		3 (37.5%)		
		Moderate	2 (25%)		0 (0%)		
		Severe	2 (25%)		0 (0%)		
	3 months	Normal	0 (0%)	0.564	3 (37.5%)	0.038	0.038
		Very mild	1 (12.5%)		1 (12.5%)		
		Mild	3 (37.5%)		1 (12.5%)		
		Moderate	4 (50%)		3 (37.5%)		

Table S2. Comparison of dry eye assessment tools in HWJMSC-derived exosome and control groups at baseline and after 2, 4, and 12 weeks.



- Uncropped blots of western blot analysis indicated the expression of exosomal surface markers, including CD9, CD63 and CD81.

Informed consent: All patients signed informed consent forms.

Financial support: This study was self-funded by its authors and received no funding from any government/non-governmental organization.