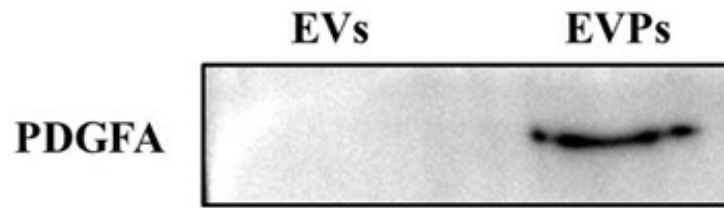


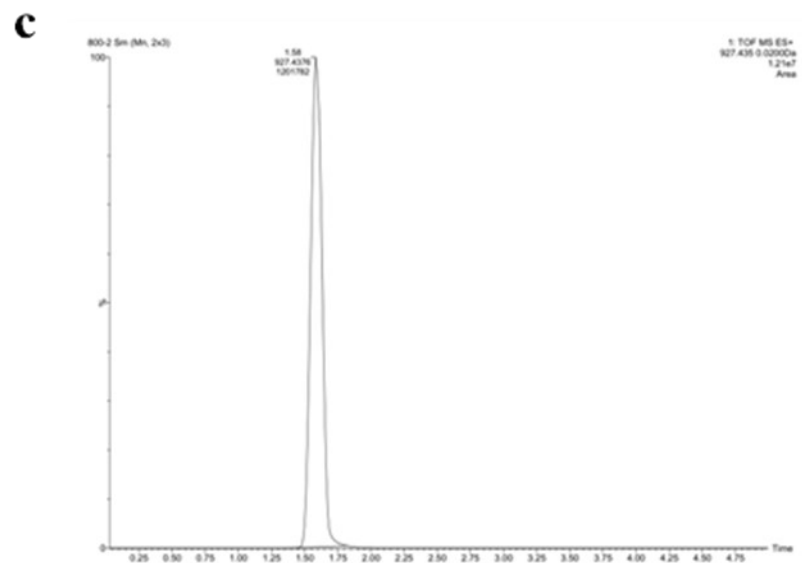
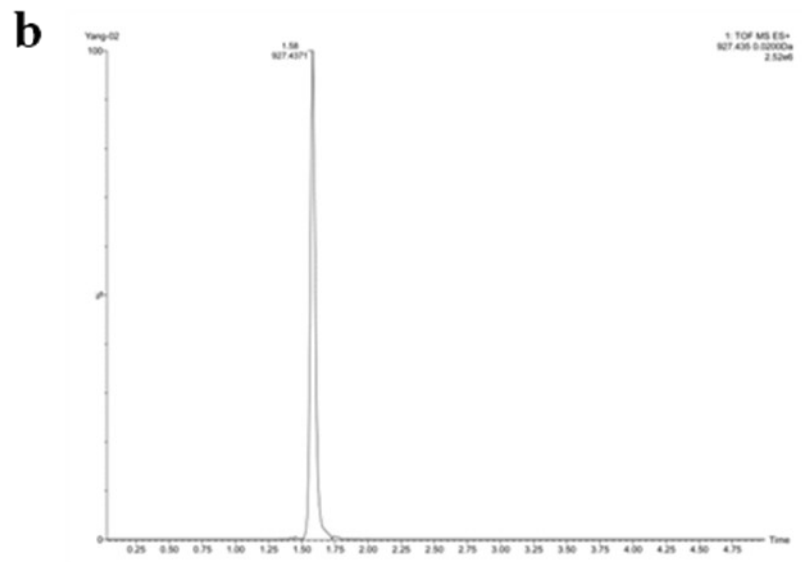
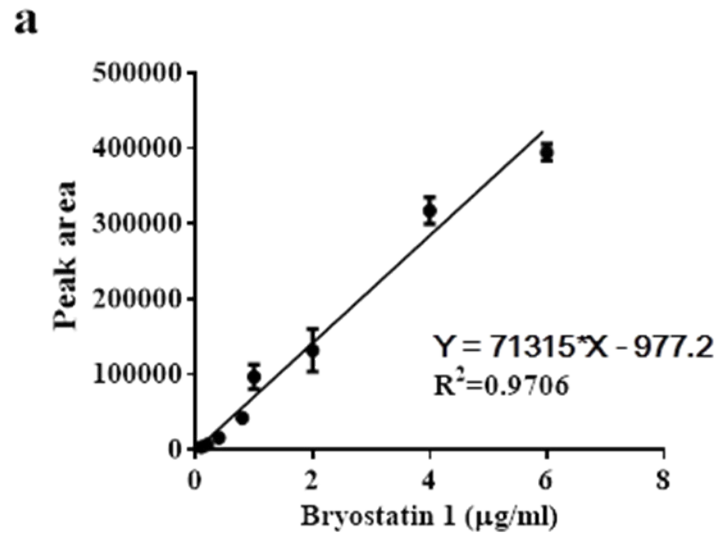
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2 **Sup Fig 1. Expression of PDGFR $\alpha$  in other tissues.** Immunostaining for PDGFR $\alpha$  in (a) Heart, (b)  
3 Liver, (c) Spleen, and (g) Kidney with Naïve and EAE mice. Scale bar = 100  $\mu$ m. (e) Quantification  
4 the numbers of PDGFR<sup>+</sup> cells from Heart, Liver, Spleen, and Kidney. Student t-tests were used to  
5 determine p values.

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7  
8 **Sup Fig 2. Expression of PDGFA in EVs/EVPs.** Western blot analysis of EVs and EVPs from  
9 NSCs.  
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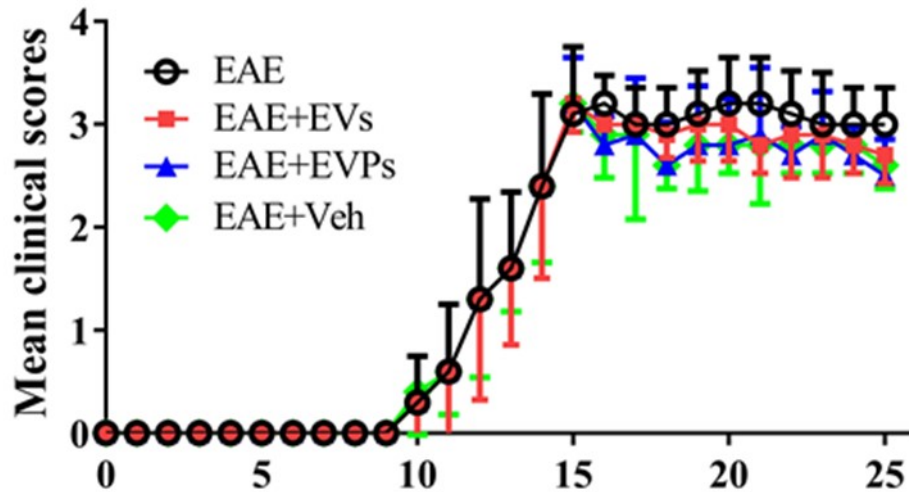
11

12 **Sup Fig 3. The amount of Bryo-1 encapsulated into EVs/EVPs was assessed by UHPLC-Q-TOF-**

13 **MS. All analyses were performed using a C18 column with a mobile phase of acetonitrile-water (90:10,**

14 v/v) containing 0.1% formic acid and delivered at a flow rate of 0.4 mL/min at 30°C. The standard curve  
15 of Bryo-1 is shown in (a), and the typical HPLC profile for Bryo-1 extracted from EVs/EVPs (b) and  
16 Bryo-1 standards (c) are shown here.

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19 **Sup Fig 4. Therapeutic effect of EVs and EVPs on EAE.** EAE mice were injected i.v. with PBS, EVs  
20 and EVPs ( $1 \times 10^8$  particles) at disease peak (day 14 p.i.) every 3 days. Mice were scored daily, in a blinded  
21 fashion, by two researchers for disease severity according to a 0–5 scale. Data are shown as mean values  
22  $\pm$  SD (n = 5 each group) and are a representative of two experiments.

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35 **Supplementary Table 1**

<b>Clinical Information</b>							
<b>RMMSc #</b>	<b>Tissue</b>	<b>Slice #</b>	<b>Sex</b>	<b>Age</b>	<b>Autopsy #</b>	<b>PMI(hrs )</b>	<b>Sample</b>
260	Brain	8	M	55	A06-14	NA	MS
239	Brain	Coronal Section	M	49	A04-33	NA	MS
344	Snap frozen Rt. Temporal plaque (1)	7	F	64	A10-149	5.5	MS
344	Brain	9	F	64	A10-149	5.5	MS
301	Brain	Number unknown	F	60	AC08-117	NA	MS
252	Brain	3	F	64	AC08-62	4	MS
252	Snap frozen periventricular (1) and pons plaque		F	64	AC08-62	4	MS

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37 **Supplementary Table 2**

<b>Primers for PCR</b>		
<b>Gene</b>	<b>Forward(5'-3')</b>	<b>Reverse(5'-3')</b>
PDGFA	ACTTCTAGAATGAGGACCTGGGCTT	CTTGAATTCTCACCTCACATCTGTC
	GCCT	TCCT

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39 **Supplementary Table 3**

<b>Primers for RT</b>		
<b>Gene</b>	<b>Forward(5'-3')</b>	<b>Reverse(5'-3')</b>
PDGFR $\alpha$	GGGATCCCGAGCGTGCTA	CAGCTGAGGACCAGAAAGACC
IL-17a	TTTAACTCCCTTGCGCAAAA	CTTCCCTCCGCATTGACAC
IL-17f	TGCTACTGTTGATGTTGGGAC	AATGCCCTGGTTTTGGTTGAA
IFN- $\gamma$	ATGAACGCTACACACTGCATC	CCATCCTTTTGCCAGTTCCTC
GM-CSF	GTGGTCTACAGCCTCTCAGCA	GCATGTCATCCAGGAGGTTT
IL1- $\beta$	CTCTCCACCTCAATGGACAGA	TGCTTGGGATCCACACTCTC
IL-6	ACACATGTTCTCTGGGAAATCGT	AAGTGCATCATCGTTGTTTCATAC
IL-5	TGTCCCTACTCATAAAAATCACCA	TCCGTCTCTCCTCGCCACAC
	G	
IL-10	GCATGGCCAGAAATCAAGG	GAGAAATCGATGACAGCGCC
IL-11	CCTGGCAGACACACGGCAACT	CTCGAAGCCTTGTCAGCACACC
IL-22	GTGAGAAGCTAACGTCCATC	GTCTACCTCTGGTCTCATGG
IL-12p35	CATCGATGAGCTGATGCAGT	CAGATAGCCCATCACCTGT
TGF- $\beta$	CACTGATACGCCTGAGTG	GTGAGCGCTGAATCGAAA

TNF- $\alpha$	GACGTGGAAGCTGGCAGAAGAG	GCCACAAGCAGGAATGAGAAG
iNOS	ACCCACATCTGGCAGAATGAG	AGCCATGACCTTTCGCATTAG
IL-21	GCACCGTCAAGGCTGAGAAC	GGCATTAGCTATGTGCTTCTGTT
GAPDH	CCAATGTGTCCGTCGTGGATCT	GTTGAAGTCGCAGGAGACAACC

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