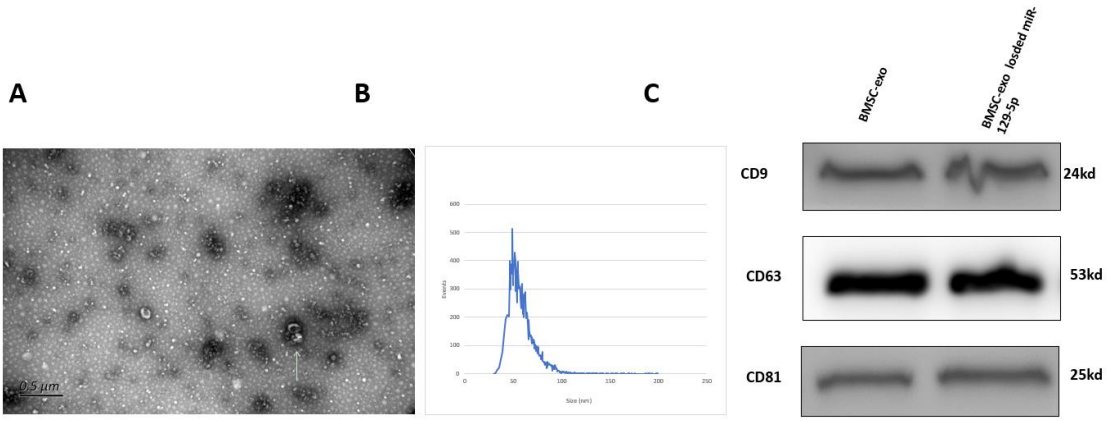
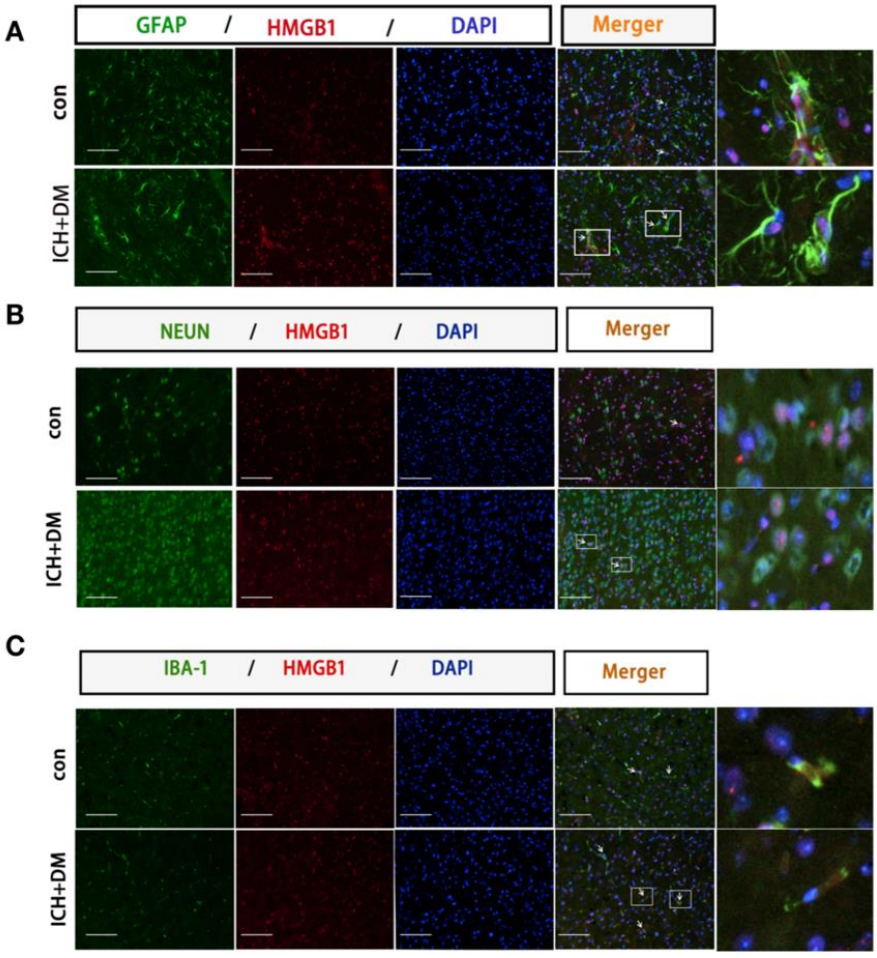
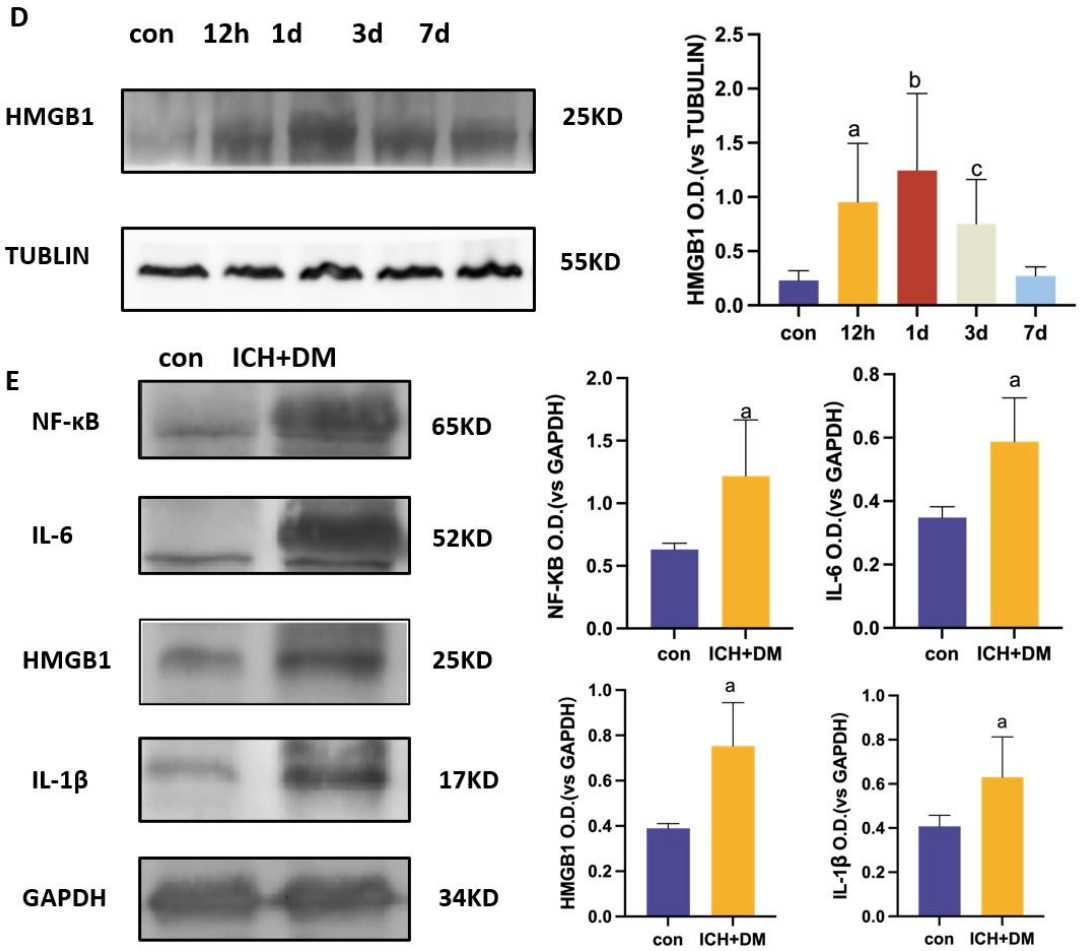
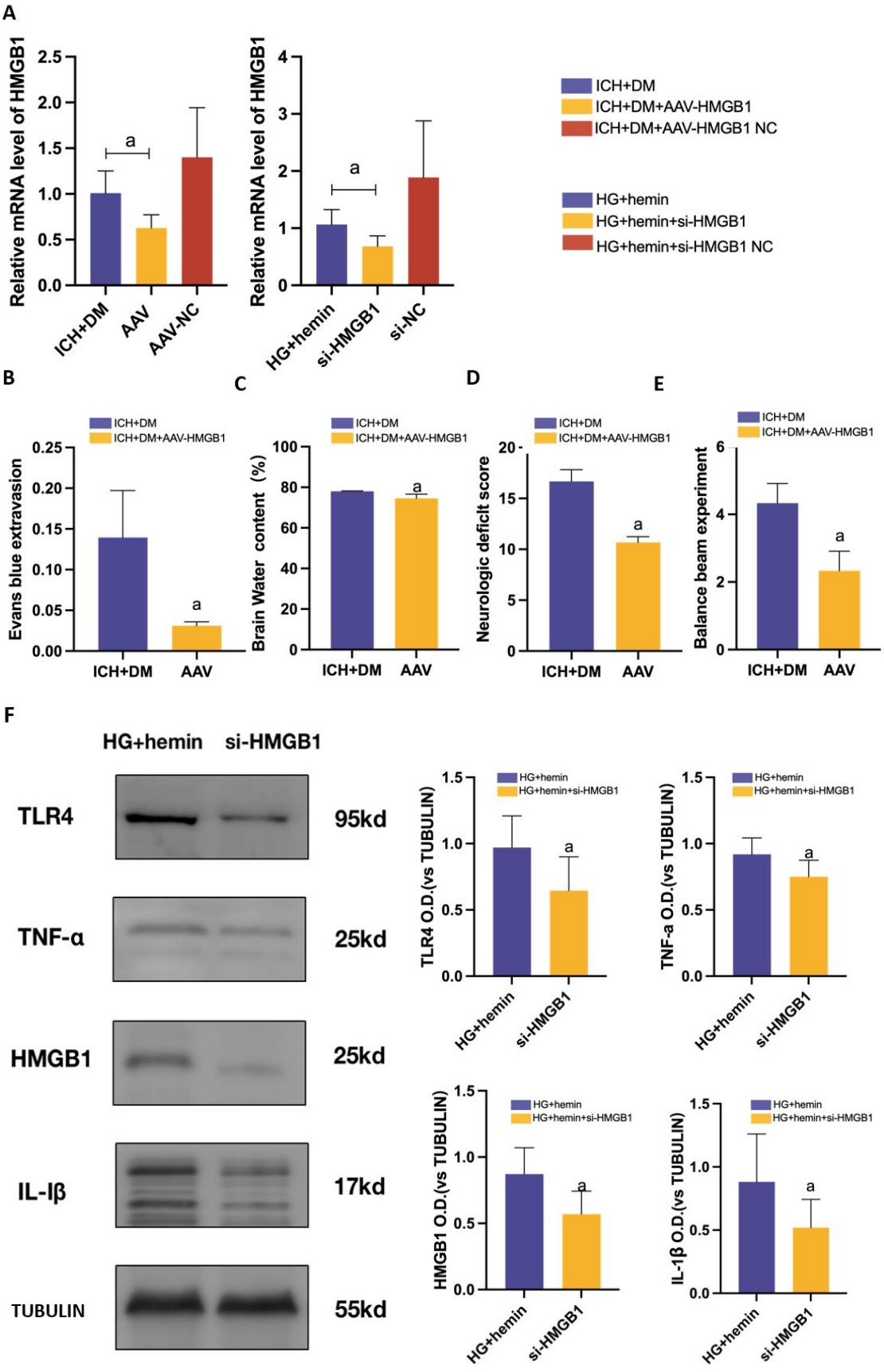


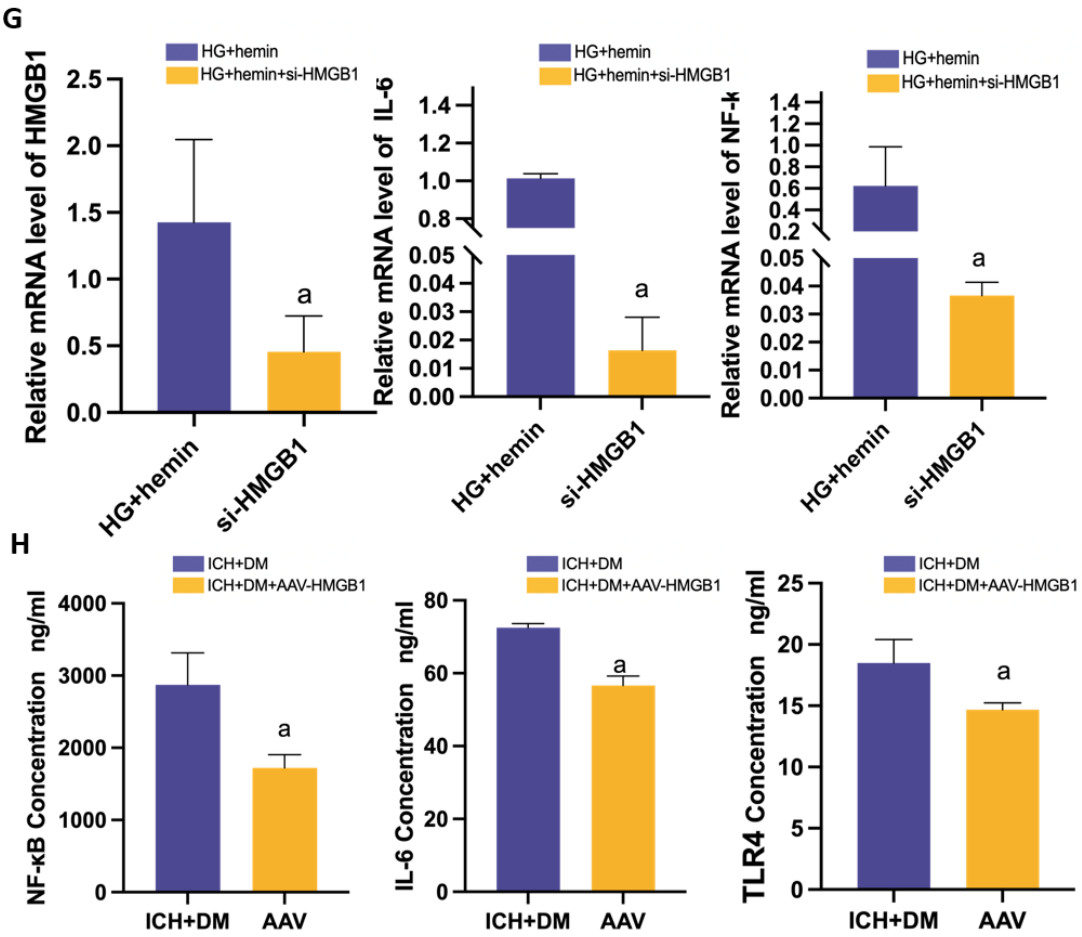
Supplementary Figure 1 Characterization of BMSC-exo loading with miR-129-5p. A: BMSC-exo loading with miR-129-5p were shaped like saucers under electron microscopy, Scale = 0.5 μm; B: exosome particle microscopy with diameters between 40 and 100 nm. C: western blot analysis of protein expression of exosome markers: CD9, CD63, CD81.





Supplementary Figure 2 HMGB1 is highly expressed in microglia cells after diabetic cerebral hemorrhage and may be involved in early inflammatory injury.A-C: Immunofluorescence experiments were performed to detect co-localisation of HMGB1 with astrocytes, neurons and microglia. Scale bar = 50 μm. D:western blot detection of HMGB1 expression at different time points after diabetic cerebral haemorrhage , and the experimental data were expressed as mean ±SD. 12h group is brain tissue protein 12 hours after diabetic cerebral hemorrhage, 1d is brain tissue protein 1 day after diabetic cerebral hemorrhage, 3 days is brain tissue protein 3 days after diabetic cerebral hemorrhage, and 7d is brain tissue protein 7 days after diabetic cerebral hemorrhage, where 12h vs con $^{a}P < 0.01$; 1d vs con $^{b}P < 0.01$; 3d vs con $^{c}P<0.05$; 7d vs con was not statistically significant. E: The expression of HMGB1, IL-1β, IL-6 and NF-κB was detected by western blot, and the experimental data were expressed as mean ± SD. $^{a}P < 0.05$, *t* test.


A
Relative mRNA level of HMGB1
ICH+DM
AAV
AAV-NC
HG+hemin
si-HMGB1
si-NC
ICH+DM
ICH+DM+AAV-HMGB1
ICH+DM+AAV-HMGB1 NC
HG+hemin
HG+hemin+si-HMGB1
HG+hemin+si-HMGB1 NC
B
Evans blue extravasion
C
Brain Water content (%)
D
Neurologic deficit score
E
Balance beam experiment
F
HG+hemin
si-HMGB1
TLR4
95kd
TNF-α
25kd
HMGB1
25kd
IL-Iβ
17kd
TUBULIN
55kd
TLR4 O.D.(vs TUBULIN)
TNF-a O.D.(vs TUBULIN)
HMGB1 O.D.(vs TUBULIN)
IL-1β O.D.(vs TUBULIN)



Supplementary Figure 3 Inhibition of HMGB1 expression can reduce the expression of inflammatory factors and reduce neural function damage. A: *In vitro* microglia were transfected with si-HMGB1, in vivo mice were injected with AAV in the brain, and HMGB1 expression was detected by qRT-PCR. Experimental data are expressed as mean ± SD, $^{a}P < 0.05$, *t* test. B: Evans blue detection of blood-brain barrier damage in mice. Experimental data are expressed as mean ± SD, $^{a}P < 0.01$, *t* test. C: Detection of brain water content in mice by wet and dry weight method. Experimental data are expressed as mean ± SD, $^{a}P < 0.05$, *t* test. D-E: Neurological function score and balance beam experiment to detect neurological impairment. Experimental data are expressed as mean ± SD, $^{a}P < 0.05$, *t* test. F: TLR4, IL-1β, HMGB1, TNF-α expression was detected in vitro by western blot.The experimental data were expressed as mean± SD, $^{a}P < 0.05$, *t* test. G: qPCR detection of HMGB1 IL-6 and TLR4 expression. Experimental data are expressed as mean ± SD, $^{a}P < 0.05$, *t*

test. H: In *vivo* Elisa detection of TLR4, IL-6, NF-κb inflammatory factor expression. Experimental data were expressed as mean ± SD, $^{a}P < 0.05$, *t* test.