



**SUPPLEMENTARY FIG. S1.** Schematic description of *Mir-122a*-mediated posttranscriptional regulation. (A) Normal liver cells have high level of *miR-122a*, which promotes the blockade of AAV transgene expression by binding to the *miR-122a* target sequences within the AAV transgene mRNA and preventing translation of the protein. (B) In advanced HCC, *miR-122a* levels are low or undetectable, and therefore AAV transgene expression is not blocked.