Zhu et al. aimed to investigate the role of MEG8/miR-454-3p/TNF-α in bone-invasive pituitary neuroendocrine tumors (BIPAs). In this study, they reported that lncRNA MEG8 and TNF-α are upregulated in BIPA tissues while miR-454-3p is downregulated, which is associated with poor progression-free survival (PFS). Functional assays revealed the role of up-regulated MEG8 and down-regulated miR-454-3p in promoting bone destruction. Mechanistically, MEG8 promotes TNF-α expression by sponging miR-454-3p, which ultimately leads to the occurrence of bone destruction. The mechanism is confirmed in vivo and in vitro. Therefore, this data illustrated a new regulatory mechanism of MEG8/miR-454-3p/TNF-α in BIPAs. It may provide a useful strategy for diagnosis and treatment for BIPA patients [1].

1)
Zhu HB, Li B, Guo J, Miao YZ, Shen YT, Zhang YZ, Zhao P, Li CZ. LncRNA MEG8 promotes TNF-α expression by sponging miR-454-3p in bone-invasive pituitary neuroendocrine tumors. Aging (Albany NY). 2021 May 19;13. doi: 10.18632/aging.203048. Epub ahead of print. PMID: 34016788.