Angiomyolipomas are the most common benign tumour of the kidney. Although regarded as benign, angiomyolipomas may grow such that kidney function is impaired or the blood vessels may dilate and burst, leading to bleeding.

A 21-year female patient with large bilateral angiomyolipoma (AML) in both kidneys with the longest diameter more than 12.3 cm and subependymal giant cell astrocytoma (SEGA). Treatment with everolimus (EVE) was initiated at a dose of 10.0 mg/day and continued during the following 3 years. Magnetic resonance imaging (MRI) was performed before treatment with everolimus was initiated, and consequently at 12 and 36 months for follow-up of the efficacy of the treatment. After 3 years, the total size of the largest AML decreased by ~24.0% in the longest diameter. A reduction in the total size of SEGA was also observed. The most common adverse effect of treatment was stomatitis grades 3 to 4 and one febrile episodes associated with a skin rash that required a reduced dose of EVE. In conclusion, the everolimus treatment improved even such a large renal AML and the effect persisted during the long-term administration with a small number of adverse effects. A positive effect was observed on the brain tumor as well.


