The cytotoxic mechanism of APY0201, a PIKfyve inhibitor, against multiple myeloma

1. APY0201 binds to PIKfyve, activating it.
2. PIKfyve enzymatically inactivates TBEB.
3. Activated TBEB promotes autophagosome biogenesis.
4. Autophagosome biogenesis leads to an increase in pH and vacuolization phenotype.
5. Lysosome biogenesis and maturation of proteases contribute to autophagic flux.

Bonolo De Campos et al., Haematologica, 2020