Despite the clinical benefits of existing prostate cancer treatments, patients continue to develop therapeutic resistance and recurrence rates remain high. Cholesterol is an essential biogenic molecule responsible for several cellular processes including serving as the precursor for prostate cancer driving androgens. This seminar describes the ability of the statin class of cholesterol synthesis inhibitors to reduce tumoral de novo steroidogenesis and improve clinical outcomes of prostate cancer patients receiving abiraterone and enzalutamide. Further, the seminar will discuss the role of cholesterol uptake protein SR-B1 in the development and proliferation of prostate cancer alongside data demonstrating an antagonism induced autophagic phenotype as potential therapeutic target for future development.