Objective: Despite initial therapeutic success through androgen ablation in patients with advanced prostate cancer, the vast majority progress to androgen independence. Somatostatin (SST) analogs are a viable therapeutic modality before resorting to chemotherapy or immunotherapy. Their mechanism of action is related to a reduction in the IGF-1 (survival factor, reaction on neuroendocrine cells) appearing incrementally after long-term androgen deprivation and a possible suppression of GnRH receptors in prostate cancer following exposure to LHRH agonists. Methods: The computerized databases Medline, NCBI and OMIM were searched for the terms, somatostatin and prostate cancer, in parallel with printed bibliographic references. Forty-two studies were included and 267 patients with androgen-independent prostate cancer (AIPC) who were treated with SST analogs alone or in combination with other medications, e.g. dexamethasone, were analyzed. Results: In 42 studies with 267 AIPC patients, SST analogs were found to be effective, particularly when combined with estrogens or corticosteroids. The side effects are mild and related to the gastrointestinal tract. Conclusions: It would be interesting to study SST analogs in randomized trials including patients with well-defined AIPC. Whether SST analogs could be given earlier during sequential hormonal therapy remains to be studied.