

# The Pfeifer Protocol and Gynaecomastia

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Gynecomastia, the swelling and enlargement of the male breasts, is a rather common condition in the male population. There are three age peaks for gynaecomastia: New-born male babies, teenage boys and elderly men. The condition can be caused by a multitude of medical- and other reasons (please see: <https://www.nhs.uk/common-health-questions/mens-health/what-is-gynaecomastia/>; <https://ncbi.nlm.nih.gov/books/NBK279105/>) that disturb the delicate balance in the sex-hormones leading to increased oestrogenic and lower androgenic effects in the male body. Whenever oestrogens are getting too high in the male body, gynaecomastia can develop.

Although there are many reasons for gynaecomastia in the elderly, the main cause for men with prostate cancer is the treatment itself. Most of the medications used to treat prostate cancer will cause a shift in the balance between oestrogen and testosterone towards higher circulating oestrogens in the patient's body, eventually causing gynaecomastia. Such medications are for example: cyproterone, flutamide, bicalutamide, Finasteride and Ketoconazole – the very medications we use to treat prostate cancer. In addition to those medications, there is a multitude of other common drugs that can cause gynaecomastia, for example: cimetidine, spironolactone, certain antipsychotics, ethanol, busulfan, vincristine, growth hormone, digitalis, clomiphene, and others. Overall, it is estimated that 25% of gynaecomastia in the elderly is caused by various medications.

The development of gynaecomastia can be prevented in most men with a short radiation therapy to both breasts prior to starting on the prostate cancer medication. Although rather effective, some patients are reluctant to receive radiation treatment, and some men may not benefit from it and develop gynaecomastia despite the prophylactic radiation.

Treatment of gynaecomastia can be done either with medication or with surgical removal of the enlarged breast tissue. Medical treatment for men who developed gynaecomastia due to prostate cancer medications can be achieved with oral intake of 10-20 mg per day of tamoxifen (<https://ncbi.nlm.nih.gov/pmc/articles/PMC4550398/>). Despite this positive effect of tamoxifen on gynaecomastia development, patients would have to take another medication on a daily basis, which comes with its own side effects. Surgery, however, is a one time treatment done by a plastic surgeon with very little risk. However, even the removal of the enlarged breast tissue is no guarantee that gynaecomastia will not recur.

ProstaSol, the medpro supplement used by many patients with prostate cancer of various stages, contains plant-derived oestrogenic substances amongst other cancer fighting ingredients. The oestrogenic substances in ProstaSol could cause gynaecomastia, if their concentration in the circulating blood of the patient was high enough to tip the oestrogen / testosterone balance significantly in favour of oestrogen. ProstaSol, at the usual recommended dosage of 2 tablets twice a day, will only rarely cause gynaecomastia development, but it may happen after a longer period of intake in about 15 to 20% of patients. Men, who already have an imbalanced oestrogen / testosterone ratio in their circulating blood, may be more prone to this development (up to 30%). Gynaecomastia from ProstaSol is, however, reversible, when the dose of the ProstaSol is reduced or the intake is discontinued. This is in contrast to the gynaecomastia that develops with bicalutamide (70-90%) and other prostate cancer medications, which is only partially reversible. After longer treatment with bicalutamide gynaecomastia is often irreversible after discontinuation of this drug, due to fibrosis formation in the breast tissue (<https://ascopubs.org/doi/10.1200/JCO.2005.03.8505>).

Please note that ProstaSol being sold does not contain any synthetic hormones (such as diethylstilbestrol). Batches are regularly tested for this contaminant.