

**NON-PSA PRODUCING PROSTATE CANCER**  
**NEUROENDOCRINE CANCER CELLS**

Compiled by Charles (Chuck) Maack – Prostate Cancer Activist/Mentor

**DISCLAIMER:** Please recognize that I am not a Medical Doctor. I have been an avid student researching and studying prostate cancer as a survivor and continuing patient since 1992. I have dedicated my retirement years to continued research and study in order to serve as an advocate for prostate cancer awareness, and, from a activist patient's viewpoint, to voluntarily help patients, caregivers, and others interested develop an understanding of prostate cancer, its treatment options, and the treatment of the side effects that often accompany treatment. There is absolutely no charge for my mentoring – I provide this free service as one who has been there and hoping to make your journey one with better understanding and knowledge than was available to me when I was diagnosed so many years ago. Readers of this paper must understand that the comments or recommendations I make are not intended to be the procedure to blindly follow; rather, they are to be reviewed as my opinion, then used for further personal research, study, and subsequent discussion with the medical professional/physician providing your prostate cancer care.

As noted in this paper <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4297323/>

“A number of markers are used in clinical practice or research for detecting neuroendocrine differentiation. Typical neuroendocrine markers used in clinical practice to elucidate NEC are chromogranin, synaptophysin, neuron specific enolase (NSE), and CD56. Neuron specific enolase (NSE) is considered a generic marker for both neurons and NEC and although it has high sensitivity, its specificity is low. Chromogranin is a specific NEC marker as it is one of the common constituents of NEC secretory granules. Synaptophysin is also a well-established marker for NED. CD56 labels neuronal cells, although the specificity of this marker for NED in the prostate is not clear.”

As well as:

“In general, NEPC (My note: Neuroendocrine Prostate Cells) differ from conventional PCa histologically by presence of neuroendocrine cells which do not express generic PCa markers like AR, P501S, PSMA, PSAP and PSA but

characteristically expresses neuroendocrine markers such as chromogranin A, synaptophysin, CD56, and NSE “

My note: Medical Oncologist Stephen B. Strum, M.D., FACP, a specialist specifically in research and treatment of advanced, high grade prostate cancer since 1983, has regularly recommended the testing of PAP, CGA, CEA, and NSE to determine aggressiveness of prostate cancer, but rarely prescribed by physicians.

More as regards small cell prostate cancer:

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2873892/>

Unfortunately, prognosis is poor for those men found to have non-PSA producing prostate cancer - with small cell prostate cancer among them – that don't cause your PSA level to rise, so they're not always picked up by a PSA test. As noted in this paper,

<http://prostatecanceruk.org/prostate-information/rare-prostate-cancer>

small cell prostate cancer develops from cells in the prostate called neuroendocrine cells. You may hear it called a neuroendocrine prostate cancer. Neuroendocrine cells do not produce PSA, so a PSA test won't help to diagnose small cell prostate cancer. And PSA tests won't be used to monitor it, either. Though treatment for aggressive small cell prostate cancer requires chemotherapy, the treatment is more palliative to prolong survival than cure.

Again, unfortunately, because of this non-producing of PSA, such men eventually diagnosed with prostate cancer are already experiencing advanced, high grade prostate cancer that has already metastasized.

Those otherwise healthy men fortunate enough to have annual DRE checks despite normal PSA levels, or possibly a TURP because of BPH, may be found to have small-cell prostate cancer in early enough development to be eradicated with surgical removal or radiation before spreading.