

## Guidance on the Use of Serum Tumour Markers in Primary Care

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Serum tumour markers are molecules that can be present at higher concentrations in patients with cancer.<sup>1</sup> Tumour markers can be used to provide more information about a cancer, particularly related to disease progression, response to treatment and/or recurrence of a histologically proven cancer.<sup>2,3</sup>

Patients will present to Primary Care with signs or symptoms concerning of cancer. Where there is a concern for a site-specific malignancy above the approximate 3% risk threshold, as set by the National Institute for Health and Care Excellence (NICE), patients should be referred directly through a 2 week-wait suspected cancer pathway.<sup>4</sup>

Patients that present with vague, non-site specific symptoms can be a diagnostic challenge in primary care. These symptoms may be related to a range of serious benign conditions, but also can be the presentation of an underlying malignancy.<sup>5</sup> Within this cohort of patients, certain preliminary investigations are commonly used to guide decision making and help to direct referrals.<sup>6</sup> Where the suspicion of cancer remains, a referral can be made to a Rapid Diagnostic Centre (RDC) as part of the NHS England and NHS Improvement strategy to facilitate an appropriate diagnostic pathway for this cohort of patients.<sup>7</sup>

NG12 NICE guidelines recommend undertaking a serum PSA or CA125 in certain clinical scenarios<sup>4</sup>, which is further summarised below in Table 1.

Other serum tumour markers (including CA19-9, CEA, CA 15-3) are of limited diagnostic value and are not recommended for testing in primary care.<sup>3,8</sup> In particular, they are not helpful for diagnosis in patients with non-site specific symptoms and are therefore not recommended prior to diagnostic testing in the form of imaging or biopsy.<sup>1</sup> Inappropriate testing may lead to additional unnecessary investigations<sup>1</sup>, and a referral to an appropriate diagnostic cancer pathway is preferable.

**Table 1 (NICE Guidance on the use of CA 125 and PSA in Primary Care)<sup>3</sup>**

| Serum Tumour Marker | Indication for Testing in Primary Care   |
|---------------------|--|
| CA 125              | <p>Alongside referral to Gynaecology if ascites and/or a pelvic or abdominal mass is found on examination</p> <p>Women over 50 with:</p> <ul style="list-style-type: none"> <li>- Persistent abdominal distension / bloating</li> <li>- Early satiety / loss of appetite</li> <li>- Pelvic or abdominal pain</li> <li>- Increased urinary urgency and/or frequency</li> <li>- Symptoms suggestive of Irritable Bowel Syndrome</li> <li>- Unexplained weight loss, fatigue or changes in bowel habit</li> </ul> |
| PSA                 | <p>Alongside a digital rectal examination to assess for prostate cancer in men with:</p> <ul style="list-style-type: none"> <li>- Any lower urinary tract symptoms, (such as nocturia, urinary frequency, hesitancy, urgency or retention)</li> <li>- Erectile dysfunction</li> <li>- Visible haematuria</li> </ul>  |

## References

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