

# Re: Nanobacteria Link to Cancer: Nexus Magazine Article

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*Source:* <http://sci.tech-archive.net/Archive/sci.med.diseases.cancer/2005-11/msg00006.html>

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- *From:* "NanoBiotech Reviews" <[gmezo@xxxxxxxxxxxxxxxx](mailto:gmezo@xxxxxxxxxxxxxxxx)>
  - *Date:* 4 Nov 2005 07:02:41 -0800
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Steph...Here's a scientific study published in the research Journal of Histopathology linking Nanobacteria Infection with Ovarian Cancer.

Histopathology

Volume 45 Issue 6 Page 633 – December 2004

doi:10.1111/j.1365-2559.2004.02030.x

Presence of nanobacteria in psammoma bodies of ovarian cancer: evidence for pathogenetic role in intratumoral biomineralization

G Hudelist<sup>1,2</sup>, C F Singer<sup>1</sup>, E Kubista<sup>1</sup>, M Manavi<sup>1</sup>, R Mueller<sup>3</sup>, K Pischinger<sup>3</sup> & K Czerwenka<sup>3</sup>

Hudelist G, Singer C F, Kubista E, Manavi M, Mueller R, Pischinger K & Czerwenka K

(2004) Histopathology<sup>45</sup>, 633–637

Presence of nanobacteria in psammoma bodies of ovarian cancer: evidence for pathogenetic role in intratumoral biomineralization

**Aims:** The presence of laminated, calcified extracellular debris known as psammoma bodies is a well-known histomorphological feature of ovarian adenocarcinomas and other human malignancies. Biomineralization has recently been found to be associated with a group of extremely small Gram-negative bacteria capable of precipitating calcium salts.

The aim of the present study was to evaluate a possible pathogenic link between the development of psammoma bodies and nanobacteria infection.

**Material and results:** Immunohistochemical staining and reverse transcriptase-polymerase chain reaction (RT-PCR) were used to analyse nanobacterial protein and gene expression in eight psammoma body-containing adenocarcinomas and in 10 malignant ovarian tumours without signs of biomineralization. Nanobacterial proteins were detected in eight out of eight (100%) psammoma-positive tumour samples. Conversely, none of the 10 psammoma-negative tissues (0%) was positive for nanobacterial antigens. Furthermore, nanobacterial mRNA was detectable in all of the four tissues (100%) that contained psammoma bodies, but was absent in all 10 ovarian cystadenocarcinomas (0%) that were psammoma negative.

**Conclusions:** We found a 100% concordance between the expression of

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nanobacteria and the presence of psammoma bodies in malignant ovarian tumours. Several lines of evidence suggest the involvement of these organisms in the process of biomineralization. We therefore conclude that nanobacterial infection of malignant ovarian tissue contributes to mechanisms leading to the formation of calcified deposits known as psammoma bodies.

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- ***Follow-Ups:***

- ◆ ***Re: Nanobacteria Link to Cancer: Nexus Magazine Article***  
◇ *From:* Steph

- ***References:***

- ◆ ***Nanobacteria Link to Cancer: Nexus Magazine Article***  
◇ *From:* NanoBiotech Reviews
- ◆ ***Re: Nanobacteria Link to Cancer: Nexus Magazine Article***  
◇ *From:* Steph

- Prev by Date: ***Re: Off topic : H5N1 Virus***
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