

New method to study secondary breast cancer metastasis

December 10 2013



Research led by scientists at King's College London has discovered a new way to study the mechanisms that cause breast cancer cells to spread to the bone.

Although more women than ever before are surviving <u>breast cancer</u>, 1,000 UK women are still dying from the disease each month. The majority of these deaths are caused by the metastatic form, also known as secondary breast cancer.

Recent discoveries have shown that metastasis (the process of cancer cells leaving the breast and spreading to other parts of the body) may occur early during the development of the disease, with <u>tumour cells</u> moving around the body before invading tissues and remaining dormant until 'awakened' later on.



An innovative method developed by Dr Gabriela Dontu at the Breakthrough Breast Cancer's Research Unit at King's College London, and published recently in the journal *Cancer Research*, has revealed significant progress made towards answering this question.

Professor Andrew Tutt, Unit Director explained: 'Working in collaboration with the other scientists at Kings College London, Cancer Research UK and a research team in the US, we have created a new experimental model that can be used to chart forms of tumour cell dormancy. Our model successfully recreates the conditions that cause metastatic breast cancer cells to reside in the bone and become dormant enabling us to learn more about, and ultimately hope to prevent, the progression of metastatic breast cancer.'

Dr Matthew Lam, Research Officer at Breakthrough Breast Cancer, said: 'This new method will help scientists unravel the processes that control movement of cancer cells into the bone so it can be detected early which really is the key to stopping metastasis before it takes hold.'

As part of Breakthrough Breast Cancer's new strategy, secondary breast cancer will become a main focus by working to improve patient experience of those currently living with this form of the disease, campaigning for better access to current treatments and expanding our knowledge of metastases so that we can develop better treatments in the future.

Provided by King's College London

Citation: New method to study secondary breast cancer metastasis (2013, December 10) retrieved 5 May 2024 from

https://medicalxpress.com/news/2013-12-method-secondary-breast-cancer-metastasis.html



This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.