

American Journal of Epidemiology

- [Oxford Journals](#)
- [Medicine](#)
- [American Journal of Epidemiology](#)
- [Volume 135, Number 7](#)
- Pp. 734-748

[◀ Previous Article](#) | [Next Article ▶](#)

American Journal of Epidemiology Vol. 135, No. 7: 734-748
 Copyright © 1992 by [The Johns Hopkins University School of Hygiene and Public Health](#)

research-article

Breast Cancer In Men: Risk Factors with Hormonal Implications

David B. Thomas^{1,1}, L. Margarita Jimenez^{2,1},
 Anne McTieman^{1,3}, Karin Rosenblatt¹, Helge Stalsberg⁴,
 Annette Stemhagen⁵, W. Douglas Thompson⁶,
 Mary G. McCrea Curnen⁷, William Satariano⁸,
 Donald F. Austin⁹, Raymond S. Greenberg¹⁰, Charles Key¹¹,
 Laurence N. Kolonel¹² and Dee W. West¹³

¹Program in Epidemiology Fred Hutchinson Cancer Research Center Seattle WA

²Instituto Regional de Investigacion en Salud Publica Universidad de Guadalajara Guadalajara Jalisco Mexico

³University of Washington School of Medicine Seattle WA

⁴University of Tromsø Tromsø Norway

⁵Pharmaceutical Division CIBA-GEIGY Corp Summit NJ

⁶University of Southern Maine Portland ME

⁷Connecticut Cancer Epidemiology Unit New Haven CT

⁸School of Public Health University of California Berkeley CA

⁹Resource for Cancer Epidemiology Department of Health Services Emeryville CA

¹⁰School of Public Health Emory University Atlanta GA

¹¹New Mexico Tumor Registry Albuquerque NM

¹²Epidemiology Program Cancer Research Center of Hawaii Honolulu HI

¹³Northern California Cancer Center Alameda CA

Reprint requests to Dr David B Thomas, Program in Epidemiology, MP-474, Fred Hutchinson Cancer Research Center, 1124

This Article

- ▶ [Full Text \(PDF\)](#)
- ▶ [Alert me when this article is cited](#)
- ▶ [Alert me if a correction is posted](#)

Services

- ▶ [Email this article to a friend](#)
- ▶ [Similar articles in this journal](#)
- ▶ [Similar articles in PubMed](#)
- ▶ [Alert me to new issues of the journal](#)
- ▶ [Add to My Personal Archive](#)
- ▶ [Download to citation manager](#)
- ▶ [Search for citing articles in: ISI Web of Science \(81\)](#)
- ▶ [Request Permissions](#)
- ▶ [Disclaimer](#)

Google Scholar

- ▶ [Articles by Thomas, D. B.](#)
- ▶ [Articles by West, D. W.](#)
- ▶ [Search for Related Content](#)

PubMed

- ▶ [PubMed Citation](#)
- ▶ [Articles by Thomas, D. B.](#)
- ▶ [Articles by West, D. W.](#)

Social Bookmarking



[What's this?](#)

Columbia Street, Seattle, WA 98104.

Cases included in a population-based case-control study of breast cancer in men were recruited from 10 geographic areas of the United States from 1983 to 1986. Controls, matched to cases on age and geographic area, were selected by random digit dialing for men under age 65 years and from Health Care Financing Administration files for older men. Results are based on responses from 227 cases and 300 controls to questions asked in a standardized personal interview. An increased risk of breast cancer was most strongly associated with undescended testes and was also related to orchectomy, orchitis, testicular injury, late puberty, and infertility; and a decreasing trend in risk was observed with an increasing number of children. Relative risk estimates were also elevated in relation to a history of high blood cholesterol, rapid weight gain, benign breast conditions, and possibly obesity. These findings suggest that breast cancer in men develops in response to androgen deficiency associated with testicular dysfunction and under conditions associated with excess estrogen. Risk was also found to be elevated in men with a history of amphetamine use, diabetes, and cigar smoking and reduced in men with prior head trauma. *Am J Epidemiol* 1992;135:734-48.

breast neoplasms; cryptorchism; testicular diseases

 CiteULike  Connotea  Del.icio.us [What's this?](#)

This article has been cited by other articles:



The Oncologist

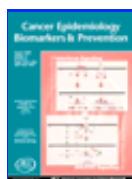
▶ [HOME](#)

S. H. Giordano

A Review of the Diagnosis and Management of Male Breast Cancer

Oncologist, August 1, 2005; 10(7): 471 - 479.

[\[Abstract\]](#) [\[Full Text\]](#) [\[PDF\]](#)



Cancer Epidemiology Biomarkers & Prevention

▶ [HOME](#)

J. R. Weiss, K. B. Moysich, and H. Swede

Epidemiology of Male Breast Cancer

Cancer Epidemiol. Biomarkers Prev., January 1, 2005; 14(1): 20 - 26.

[\[Abstract\]](#) [\[Full Text\]](#) [\[PDF\]](#)



Clinical Cancer Research

▶ [HOME](#)

E. Kwiatkowska, M. Teresiak, V. Filas, A. Karczewska, D. Breborowicz, and A. Mackiewicz

BRCA2 Mutations and Androgen Receptor Expression as Independent Predictors of Outcome of Male Breast Cancer Patients

Clin. Cancer Res., October 1, 2003; 9(12): 4452 - 4459.

[\[Abstract\]](#) [\[Full Text\]](#) [\[PDF\]](#)



Annals of Internal Medicine

[▶ HOME](#)

S. H. Giordano, A. U. Buzdar, and G. N. Hortobagyi

Breast Cancer in Men

Ann Intern Med, October 15, 2002; 137(8): 678 - 687.

[\[Abstract\]](#) [\[Full Text\]](#) [\[PDF\]](#)



JOURNAL OF THE NATIONAL CANCER INSTITUTE

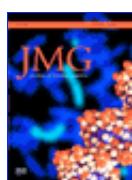
[▶ HOME](#)

A. Auvinen, R. E. Curtis, and E. Ron

Risk of Subsequent Cancer Following Breast Cancer in Men

J Natl Cancer Inst, September 4, 2002; 94(17): 1330 - 1332.

[\[Abstract\]](#) [\[Full Text\]](#) [\[PDF\]](#)



JOURNAL OF MEDICAL GENETICS

[▶ HOME](#)

J. D Fackenthal, D. J Marsh, A.-L. Richardson, S. A Cummings, C. Eng, B. G Robinson, and O. I Olopade

Male breast cancer in Cowden syndrome patients with germline PTEN mutations

J. Med. Genet., March 1, 2001; 38(3): 159 - 164.

[\[Abstract\]](#) [\[Full Text\]](#)



JOURNAL OF EPIDEMIOLOGY AND COMMUNITY HEALTH

[▶ HOME](#)

R. A Wiseman

Breast cancer hypothesis: a single cause for the majority of cases

J. Epidemiol. Community Health, November 1, 2000; 54(11): 851 - 858.

[\[Abstract\]](#) [\[Full Text\]](#)

Disclaimer:

Please note that abstracts for content published before 1996 were created through digital scanning and may therefore not exactly replicate the text of the original print issues. All efforts have been made to ensure accuracy, but the Publisher will not be held responsible for any remaining inaccuracies. If you require any further clarification, please contact our [Customer Services Department](#).

Online ISSN 1476-6256 - Print ISSN 0002-9262

[Copyright © 2008 Johns Hopkins Bloomberg School of Public Health](#)

[Oxford Journals](#) [Oxford University Press](#)

- [Site Map](#)
- [Privacy Policy](#)
- [Frequently Asked Questions](#)

Other Oxford University Press sites: [Oxford University Press](#)

