



# Cancer Research

Epidemiology

## Abstract 4637: Intra-individual changes in circulating IGF-1 and IGF-1/IGFBP-3 molar ratio are associated with colorectal adenomatous polyps presence

Adelheid Soubry, Rebecca Sedjo, Frances Wang, Tim Byers, Clifford Rosen, Anatoli Yashin, Svetlana Ukrainitseva, Steve Haffner, Ralph D'Agostino, and Dora Il'yasova

DOI: 10.1158/1538-7445.AM2011-4637 Published April 2011

Article

Info & Metrics

Proceedings: AACR 102nd Annual Meeting 2011-- Apr 2-6, 2011; Orlando, FL

### Abstract

**Background:** High levels of circulating insulin-like growth factor-1 (IGF-1) have been associated with increased risks of several cancers, including colorectal cancer.

**Methods:** In a sub-cohort of the Insulin Resistance and Atherosclerosis Study (IRAS), we examined the associations between circulating IGF-1 and IGF-1/IGFBP-3 molar ratios, as well as their change patterns during 10-year follow-up, with the presence of colorectal adenomatous polyps at the end of the follow-up.

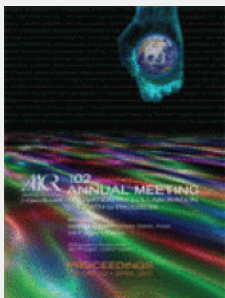
**Results:** The general trend was decrease of both variables with age. Based on this trend, two patterns were considered: "no increase" (variation within 15% of baseline and/or decrease) and "ever increase" (at least one increase of > 15%). In the subgroup of participants with normal glucose tolerance, "ever increase" was positively associated with colorectal adenoma: ORs were 3.65 (1.30-10.8) and 2.83 (1.00-8.22) for IGF-1 and IGF-1/IGFBP-3, respectively. No association was found between actual levels of IGF-1 or IGF-1/IGFBP-3 at any time point and the presence of colorectal adenoma.

**Conclusion:** Our data suggest that increase in circulating IGF-1 and IGF-1/IGFBP-3 may represent an unnatural trend of a disturbed signaling pathway, which could favor the development of precancerous lesions, such as colorectal adenoma.

**Citation Format:** {Authors}. {Abstract title} [abstract]. In: Proceedings of the 102nd Annual Meeting of the American Association for Cancer Research; 2011 Apr 2-6; Orlando, FL. Philadelphia (PA): AACR; Cancer Res 2011;71(8 Suppl):Abstract nr 4637. doi:10.1158/1538-7445.AM2011-4637

©2011 American Association for Cancer Research

[^ Back to top](#)



April 2011  
Volume 71, Issue 8 Supplement  
[Table of Contents](#)  
[Index by Author](#)

Search this issue



[Sign up for alerts](#)

[Request Permissions](#)

[patientACCESS](#)

[Article Alerts](#)

[Email Article](#)

[Share](#)

[Tweet](#)

[Like 0](#)

▼ Related Articles

No related articles found.

Google Scholar

► Cited By...

► More in this TOC Section

Home

Alerts



Articles

Online First

Current Issue

Past Issues

Meeting Abstracts

Info for

Authors

Subscribers

Advertisers

Librarians

Reviewers

About Cancer Research

About the Journal

Editorial Board

Permissions

Submit

Feedback



Copyright © 2017 by the American Association for Cancer Research.

Cancer Research Online ISSN: 1538-7445

Cancer Research Print ISSN: 0008-5472

Journal of Cancer Research ISSN: 0099-7013

American Journal of Cancer ISSN: 0099-7374