Acquired Immune Deficiency Syndrome of Cancer

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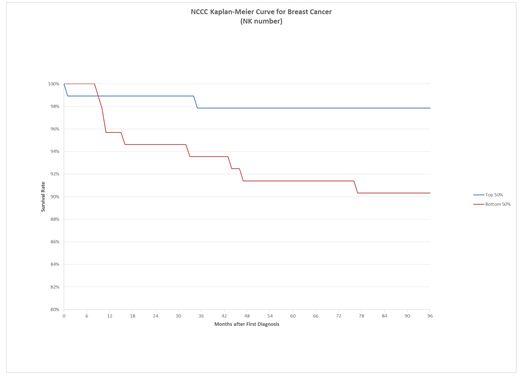
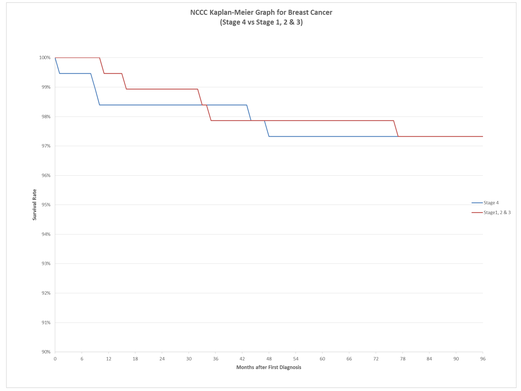


Top curve demonstrates that NK cell number is predictive for breast cancer patients survival



Bottom curve demonstrates that among 186 BCa patients seen at NCCC survival is independent of stage

News about Gay Related Immune Deficiency

- Bloomberg News (5/91977, Lopatto) reports, "Gay men get cancer almost twice as often as heterosexual men, and lesbian and bisexual women who are cancer survivors reported being less healthy than heterosexual women who had the disease," according to a study published in the journal Cancer. The higher rate "of cancer among gay men may be caused by an excess risk of anal cancer, and may also reflect the higher rate of HIV infection, which is linked to certain cancers, according to the report."

- The CNN (5/9) "The Chart" blog reports that investigators "used a large health survey conducted by the state of California - in which respondents were asked about their" sexual "orientation - to examine the impact cancer may be having on gays and lesbians in the state." The researchers found that approximately "8% of gay men had experienced a cancer diagnosis, compared with only about 5% of straight men. Among straight women and lesbians, the cancer prevalence trends were more closely matched."

- BBC News (5/9) reports, "Looking at the health of patients who survived cancer also showed differences based on sexual orientation." The researchers found that "lesbian and bisexual women were more than twice as likely as heterosexual women to say they were in 'fair or poor health,'" although "this effect did not appear in men."

- MedPage Today (5/9, Smith) reports that "the findings have immediate implications for public health," the researchers "argued, including an emphasis on prevention among gay men, and interventions to improve the perception of health among lesbian and bisexual women."

Background: Blood from Gay Related Immune Deficiency (GRID) syndrome pts was tested in 1977. All had low CD4+, CD4/CD8 < 1.0 and IgG nl or high. When HIV was discovered, the virus infection, accompanied by the immunological evaluation results, changed the syndrome AIDS to a disease, AIDS with HIV infection (AIDS/HIV). All laboratory testing ceased when HIV was described. NCCC&RI evaluated the immune parameters and clinical outcomes in cancer patients (186 breast, 86 colorectal, 7 lung, myeloma, and non colorectal GI, and 15 ovarian/cervical, head & neck, GI except colorectal)

Methods: Lab tests (CD4+ cells, CD4/CD8, IgG, and NK cells (plus others) and HIV and BCa survival stats.**Results:** A significant number of cancer patients with some, but not all, primary cell of origin, had low CD4+ cell count & CD4/CD8 ratio < 1.0 & IgG normal or high. One patient, an HIV non-progressor, had stomach cancer, then lung cancer, then prostate cancer. He is still alive over 20 years since HIV infection and over 15 and 7 years since stomach and lung cancer was diagnosed and treated. This observation defines a disease: AIDS/Cancer with subcategories related to the cell of origin, e.g., AIDS/head & neck, but so far not AIDS/breast cancer. Survival of metastatic breast cancer patients appears to be related to having normal CD4+ cell counts, normal CD4/CD8 ratios, normal IgG levels AND normal NK cell numbers. The frequency of the combined parameters of low CD4+ cell counts & CD4/CD8 < 1.0 & normal or high IgG in normal populations is 5-10%.

Conclusions: Cancer is the proliferation of the descendants of one cell with a fatal flaw in the apoptosis program. Immune surveillance results in only the occasional discovery of a lesion that when biopsied is called cancer. Survival depends on prolonging the war between the immune system and the cancer. We predicted (Cell. Immunol. 1978) that exposure to multiple allogeneic HLA types (like active homosexuals) would eventually result in a "hole" in the antigenic/idiotype repertoire, resulting in rare infections like *pneumocystis carinii* or viral induced cancers (CMV Kaposi's sarcoma or HPV cervical or anal cancer) that are DISEASES associated with an acquired immune deficiency syndrome (AIDS). Survival with cancer results from the prolongation of the war between the immune system and the cancer. The war ends when the patient dies of something else. Treatments prolong the war, sometimes for long enough to support the conclusion that the cancer has been cured. Annual physicals that include laboratory results of low CD4+ cell number & low CD4/CD8 ratios & normal IgG, may develop cancer sooner than expected.

Gay Related Immunodeficiency patients evaluated in 1976-1978:

100% had low CD3+ cell count, a CD4+/CD8+ of < 1.0, and quant IgG normal or high Immunological Evaluation of NCCC patients 2018-present

% with low CD4+ & CD4+/CD8+ < 1.0 & normal or high IgG

• Ovarian/cervical (15)	20%	3/15
• Head and Neck (15)	27%	4/15
• GI except colorectal (15)	20%	3/15
• Multiple Myeloma (7)	14%	1/7
• Thyroid (6)	0%	0/7
• Lung (15)	7%	1/7
• Colorectal (86)	2%	2/86
• Prostate (15)	7%	1/15
• Lymphoma (26)	12%	3/26

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