

Dr Rosie McNeil

(MBBCh, MSc PhD (Anat)

Senior Lecturer
Department of Anatomy & Histology

Tel +27 12 521 4939

E mail: rosie.mcneil@smu.ac.za



Ga-Rankuwa

Gauteng Province
South Africa

“3rd Edition of International Cancer Conference” (ICC 2019) in September 23-25, 2019 at London.

Theme: *“Cancer Free World – Possible or Not”*

Conference Topic: Cancer and Its Relevance with Other diseases

Abstract

1. Abstract Title:

Avoiding Drug overload and improving patient compliance by exploring the anti-cancer properties of ARDS: Efavirenz

2. All Authors (Name, Credentials –e.g. P.E., Ph.D., Company)

¹RT McNeil (MBChB, MSc, PhD)

²CB Penny (BSc, MSc, PhD)

³MJ Hosie (BSc, MSc, PhD)

¹Department of Anatomy, Sefako Makgatho Health Sciences University (SMU), Ga-Rankuwa, Gauteng province, Medunsa 0204, South Africa

²Department of Internal Medicine Wits Medical School, Parktown, Johannesburg, 2193, Gauteng province, South Africa

³School of Anatomical sciences, Wits Medical School, Parktown, Johannesburg, 2193, Gauteng province, South Africa.

3. **Presenters: Dr Rosie McNeil** (MBBCh, MSc PhD (Anat)

Senior Lecturer Department of Anatomy & Histology. Tel +27 12 521 4939, E mail: rosie.mcneil@smu.ac.za

Ga-Rankuwa, Gauteng Province , South Africa

4. **Short Description of what will be discussed during the presentation** (about 250 - 500 words)

Background and Objectives: Many side effects have been reported with ARDs, ranging from mild abdominal discomfort to suicidal tendencies. Such side effects are worsened by HIV complications such as cancers, more drugs to take. While certain cancers have been associated with HIV infection (e.g. Kaposi's sarcoma, non-Hodgkin's lymphomas and cervical cancer), spontaneous resolution of HIV-associated lung cancers have been reported with “highly active antiretroviral therapy” (HAART) (Monini 2004). Finding an ARD with anti-cancer properties will be killing two birds with one stone,

Aim: Thus the aim of this work was to investigate the anti-angiogenic property of Efavirenz in chick CAM.

Methods: Using fertile eggs as *in vivo* vascular systems to study the effects of Efavirenz, administered by a single injection into the air cells (n=6), CAM blood vessels were observed and compared to that of control embryos.

Statistics: Results were analysed using one-way analysis of variance (ANOVA) and Fisher exact test ($p < 0.05$ was considered as significant).

Results: Efavirenz had absolute anti-angiogenic effect on CAM angiogenesis, abolishing not only angiogenesis but also, erythropoiesis.

Conclusion: This efficacy of Efavirenz presents its possible use in the management of not only HIV infection and its associated cancers, but as an alternative to cytotoxic drugs. Such Patients will have less drugs to take, (and so, have a more positive perspective), thereby becoming more compliant with their treatment.

Keywords: Drug overload, Patient compliance, Efavirenz, HIV-Cancers, Angiogenesis

5. **What will the audience take away from your presentation?**

- I. Patients, even the very tedious and chronically ill are still precious people, often our blood relatives, neighbours and our loved ones
- II. HIV and cancers are out generational burden
- III. The fight against HIV and cancers is a fight for all

- Explain how the audience will be able to use what they learn?
A change of perspective towards the management of HIV patients-that here is hope, if we all keep trying
- How will this help the audience in their job?
Attitude change towards known persons living with diseases
- Is this research that other faculty could use to expand their research or teaching? Does this provide a practical solution to a problem that could simplify or make a designer's job more efficient? Will it improve the accuracy of a design, or provide new information to assist in a design problem? List all other benefits. **Yes**

6. Is this abstract connected to an organized session? If yes, please provide full session title.

No

7. Biography of presenting author (about 100 words)

Author Details:

Full Name: Dr Rosaleen Thecla McNeil

Contact Number: 27 71 975 9167

Country: South Africa

Category: (Oral/Poster Presentation): Oral

Session Name: Cancer and Its Relevance with Other diseases

Email: rosie.mcneil@smu.ac.za