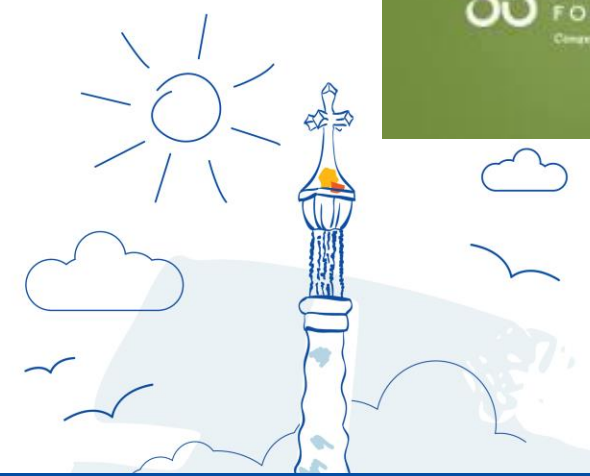




INTERNATIONAL SOCIETY OF PAEDIATRIC ONCOLOGY  
BARCELONA, SPAIN | SEPTEMBER 28 - OCTOBER 1, 2022



# ST. BALDRICK'S LECTURE: THERAPY FOR BURKITT LYMPHOMA - HIC AND LMICS

Moderators: Asim Belgaumi, Pakistan; Zainab Shinkafi-Bagudu, Nigeria



In conjunction with:



# INTRODUCTION

## **Burkitt Lymphoma: From Africa to the rest of the World and back to Africa**

Catherine Patte, France

No child should die of cancer:  
cure for more, care for all

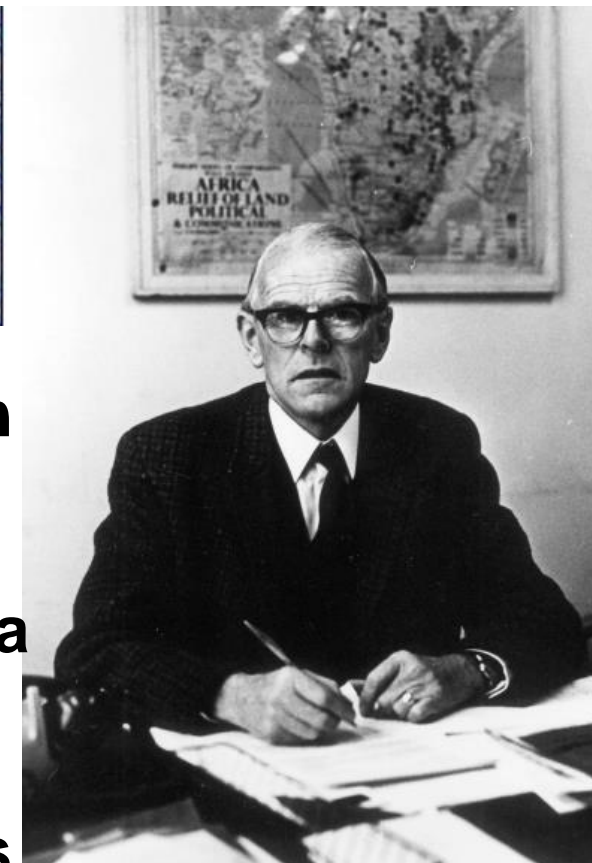
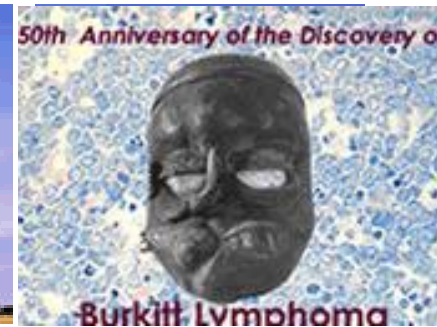


## Faculty Disclosure

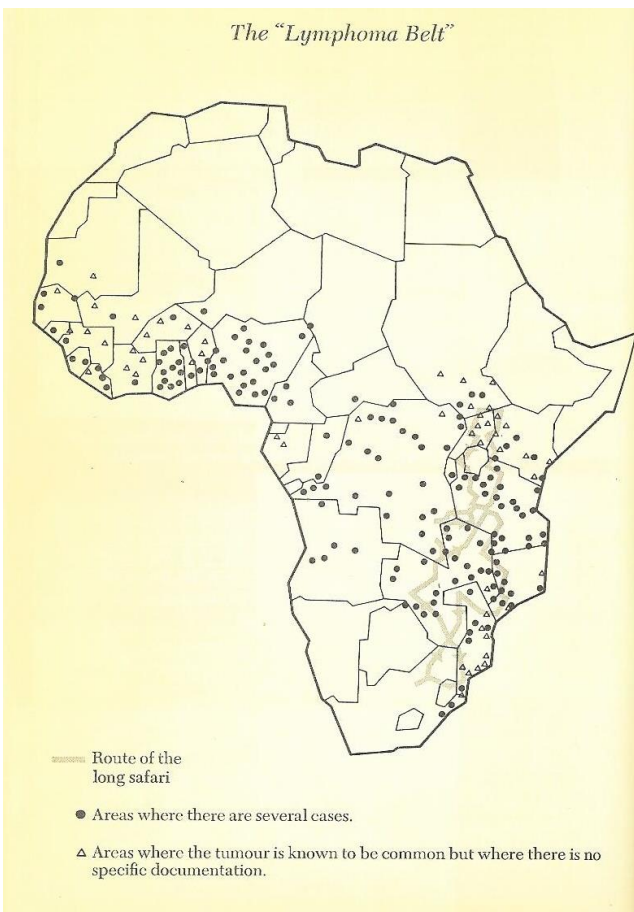
<input checked="" type="checkbox"/>	I have nothing to disclose
<input type="checkbox"/>	Yes, please specify:



# From Africa



D Burkitt (1911-1993)



- **A Sarcoma involving the jaw of children**  
*Br J of Surgery* 1958 ; 46 : 218-223
- **A tumour safari in east and central Africa**  
*Br J of Cancer* 1962 ; 16 : 379-386
- **Viral particles in cultured lymphoblasts from Burkitt's lymphoma.** *Epstein & al Lancet.* 1964;1:702-3

# From Africa to the rest of the World

- **Childhood lymphoma resembling “Burkitt tumor” outside of Africa:**  
O’Conor (US) 1965, Dorfman 1965 (US), Wright 1966 (UK), ...
- **Multiple sites, predominantly in the abdomen**

Now recognised as an aggressive NHL

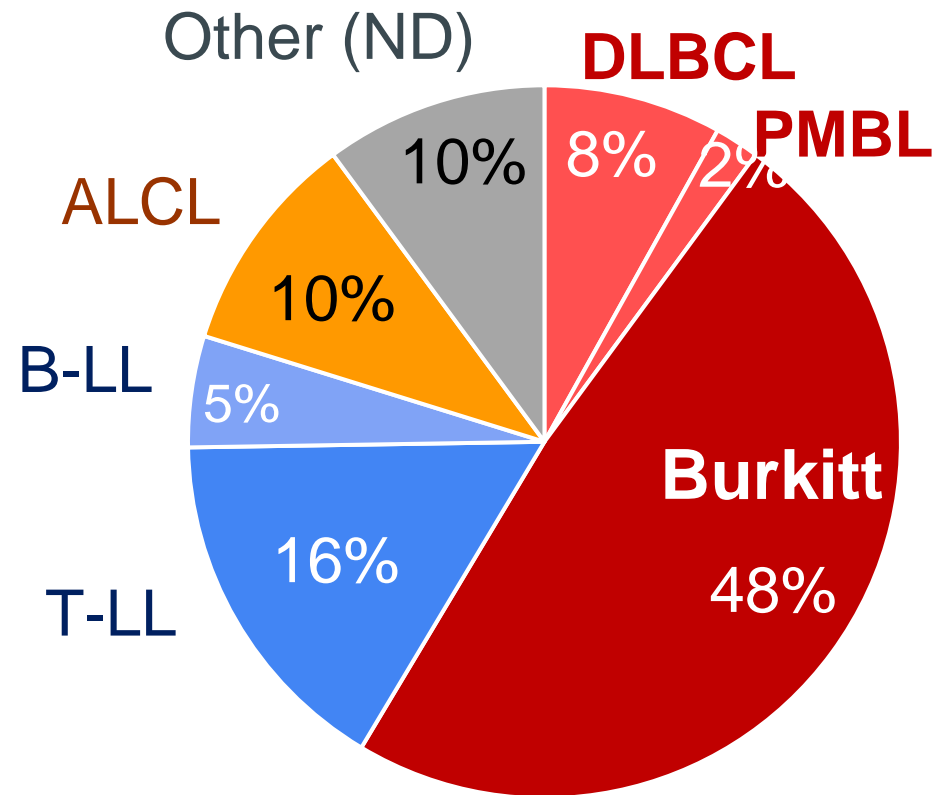
Classified as a **mature B-cell NHL (OMS)**

Originating from **germinal centre B cells**

Characterised by a **c-MYC rearrangement**

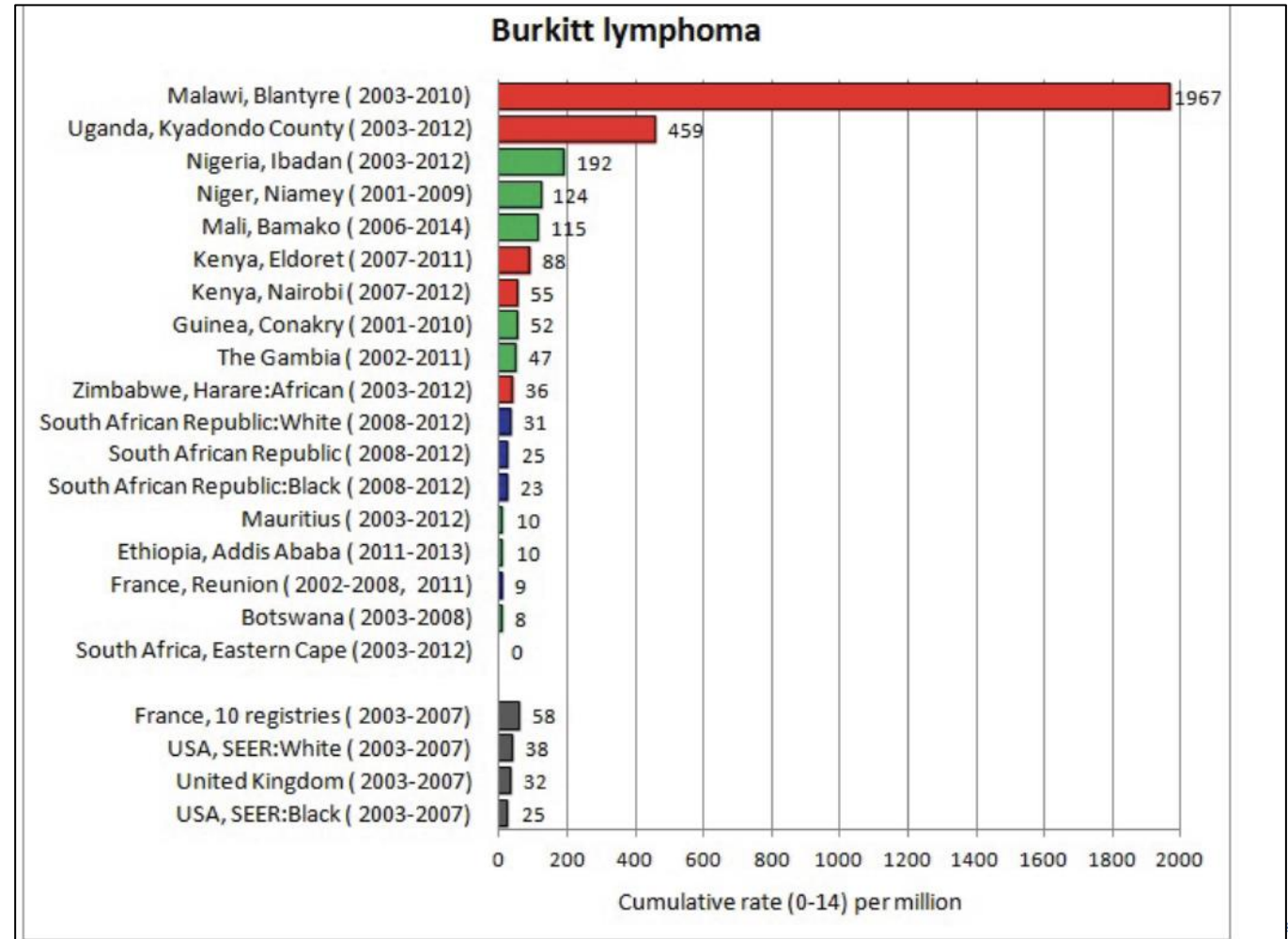


# Burkitt lymphoma: the most frequent NHL in children



From Burkhardt, Br J Haematol 2005

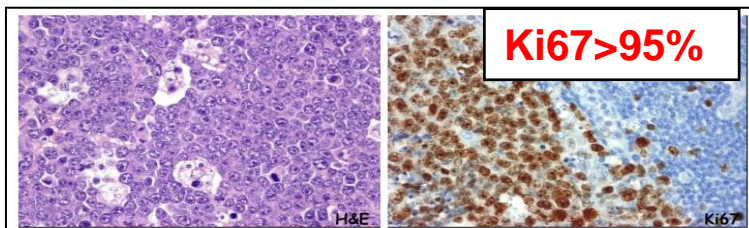
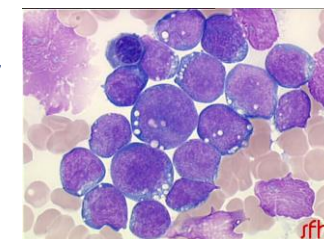
From C. Stefan. Cancer of childhood in sub-Saharan Africa, *ecancer* 2017, 11:755



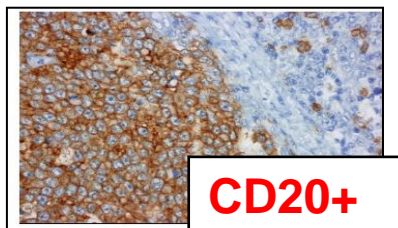
# Characteristics of Burkitt lymphoma



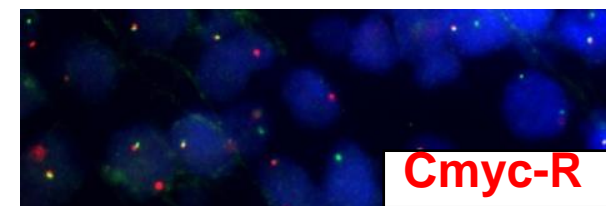
- High proliferation rate
- Fast growing tumour → large tumours
- Most frequent in **abdomen** and **head and neck**
- **Rapid dissemination**, especially in bone marrow and **CNS**
- **Early relapses < 1 year**
- **B-cell CD20+, Ki67>95%**



**Ki67>95%**



**CD20+**



**Cmyc-R**

# From Africa to the rest of the World: therapeutic aspects

- **Very sensitive to chemotherapy**, especially cyclophosphamide and methotrexate



Children treated and cured by cyclophosphamide in 1962

- However cure rates were low with monotherapy and there was a need for more aggressive polychemotherapy.
- This was developed successfully outside of Africa





# From Africa to the rest of the World and back to Africa

- Successful treatments were developed in Europe and USA with cure rates of around 90%.

This will be shown by **V Minard-Colin** (France) addressing the next challenges for Burkitt lymphoma in **HIC**

- After a brilliant start, Africa had a long period of “silence”, and cure rates are still low. But Africa is now trying to catch up although there are many difficulties.

**Ch Bouda** (Burkina Faso) will describe the situation **in Africa**, where the disease is the most frequent

- The basic biology of BL is relatively well known, but we ask: Can modern biology uncover other **biological aspects** that may help to stratify/improve therapy of patients with BL in HIC and LMIC? This will be presented by **S Turner** (UK)