

## ***Aminoglycosides and Nonaminoglycosides Influence Read-through of Premature Stop Codons in XPC Fibroblasts***

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### ***Abstract***

**A** Xeroderma Pigmentosum (XP) is a genetically inherited recessive disorder

- XP increases risk of skin cancer<sup>1</sup>:
  - nonmelanoma --- 10,000-fold,
  - melanomas --- 2,000-fold
  - tongue cancers --- 100,000-fold
- Estimated XP incidences in the USA are 1 in 1,000,000<sup>1</sup>, 1 in 20,000 in Japan<sup>5</sup>, and approximately 2.3/ million live births in Western Europe<sup>5</sup>
- XP has seven different complementation groups (A-G) translated for nucleotide excision DNA repair when exposed and damaged to UV light<sup>1</sup>
- Mutation(s) in the XP genes result in a much slower rate of DNA repair
- Some XP patients become severely sunburned after minimal sun exposure with phenotypic expressions of lentigines and progressive neurological degeneration (XPA, XPD, XPG)
- XPC increases the likelihood of developing, earlyonset freckles and skin cancer<sup>1</sup>

### ***Speaker Publications:***

1. "Patient and Physician Assessment of Surgical Scars: A Systematic Review"

[22<sup>nd</sup> World Dermatology and Aesthetic Congress](#); Webinar- June 25-26, 2020.

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### ***Biography:***

Eric Bowman is a Medical student at Howard University College of Medicine. He joined in 2017 and he completed his medicine in 2021. He is a research assistant at children's Hospital at Philadelphia.