

Sudan University of Science and Technology
College of Graduate Studies

**Assessment of Serum vitamin D levels and Vitamin D Receptors Gene
Polymorphisms Among Sudanese Females with Breast Cancer Attending
Radio Isotope Center Khartoum**

تقويم مستويات فايتمين د في مصل الدم والأشكال الجينية المتعددة لمستقبلات فايتمين د لدي النساء
السودانيات المصابات بسرطان الثدي المترددات علي مركز الخرطوم للعلاج بالاشعة والطب النووي

A Thesis Submitted for the Fulfillment of the Requirements of Ph.D Degree in
Clinical Chemistry

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال الله تعالى:

(رَبَّنَا لَا تُؤَاخِذْنَا إِنْ نَسِينَا أَوْ أَخْطَأْنَا)

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Questionnaire
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**Assessment of Serum vitamin D levels and Vitamin D Receptor Gene
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Radio and Isotope Center in Khartoum**

No.:

Age/ years:

Residence.....

Marital status:.....

Education status.....

Occupation status:.....

Height/cm.....

Wight/ Kg.....

Parity.....

Onset of breast cancer

Laboratory investigation:

Vitamin D level.....ng/mL

Genotyping of VDR

VDR polymorphisms	Genotypes
VDR-Fok1	
VDR-Taq1	
VDR-Bsm1	
VDR-Apa1	

Appendices