## CHARACTERIZATION OF 1-ACBP, B-ACBP AND PBR IN OESOPHAGEAL CANCER.



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A dissertation submitted to the Faculty of Science, University of the Witwatersrand, Johannesburg, in fulfilment of the requirements for the degree of Master of Science

## DECLARATION

I (Michelle McCabe) declare that this thesis is my own work. It is being submitted for the Degree of Master of Science in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.
(Signature of candidate)
___ day of 200

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## DEDICATION

I dedicate this work to my family, especially my mother and father for their love, patience and support, my three brothers for their love and support and hope that it will inspire them, and to my late sister who passed away from brain cancer inspiring me to be who I am today. And to everyone who supported me during my studies.

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| Abbreviations: |  |
| :---: | :---: |
| 5-FU | 5-fluorouracil |
| ACBP | AcylcoenzymeA binding protein |
| AINs | Apoptosis inducing nucleosides |
| ANC | Adenine nucleotide carrier |
| Apaf-1 | Apoptosis activating factor 1 |
| APC | Adenomatous polyposis coli |
| BAAC | Barrets oesophagus associated adenocarcinoma |
| BCH | Basal cell hyperplasia; BE, Barret's Esophagus |
| Bcl-2 | B-cell lymphoma mutant \#2 |
| Bcl-xl | B-cell lymphoma extra long |
| cAMP | Cyclic adenosine monophosphate |
| CDDP | Cisplatin |
| CDK | Cyclin dependent kinase |
| CNS | Central Nervous System |
| COX-2 | Cyclooxygenase 2 |
| CSNK | Casein kinase |
| CTSB | Cathepsin B; |
| DBI | Diazepam binding inhibitor (DBI) |
| DcR3 | Decoy receptor member 3 |
| DISC | Death inducing signalling complex |


| DLC1 | Deleted in lung cancer 1 |
| :--- | :--- |
| EMR | Endoscopic mucosal resection |
| FasL | Fas receptor ligand |
| GASC1 | Gene amplified in squamous cell carcinoma 1 |
| iNOS | Inducible nitric oxide synthase |
| Lef | Lymphoid enhancer binding factor |
| LOH | Loss of Hetereozygosity |
| LOI | Loss of imprinting |
| MMP-7 | Matrix metalloproteinase-7 |
| MPTP | Mitochondrial Permeable Transition Pore |
| MT | Metallothionein; MTX, Methotrextate |
| PRb | Retinoblastoma protein |
| PDC | Ornithine Decarboxylase |
| PCNA | Proliferating cell nuclear antigen |
| P450scc | Cytochrome P450 enzyme |
| p53 | Protein with molecular weight $\sim 53 \mathrm{kD}$ |
| P63 | Protein with molecular weight $\sim 63 \mathrm{kD}$ |

Rb Restinoblastoma

Tcf T cell specific transcription factor

TNF- $\beta$ Tumor necrosis factor- $\beta$

TSGs Tumour Suppressor Genes

VDAC Voltage-dependant anion channel

WWOX WW domain containing oxireductase

