

Supplemental Table S1. NOS expression and its relationship with human tumour progression.

Tumour type	Detected NOS localization			Relationship between NOS expression and tumour progression		References	
	Tumour cells	Vascular endothelial cells	Stromal / Immune cells	Detection methods	Positive correlation		No correlation or negative correlation
Brain	nNOS, eNOS, iNOS	eNOS, (iNOS)	iNOS	IHC, WB, ISH, NOS activity	nNOS/eNOS with tumour grade vascular eNOS with tumour cell proliferation	iNOS inversely with tumour grade	1-6
Head and neck	iNOS, eNOS	eNOS, iNOS	iNOS	IHC, WB, NB, RT-PCR, ISH, NOS activity	iNOS with p53 mutation, PGE ₂ , COX-2 and VEGF-C expression, blood and lymph vascular density, tumour stage and lymph node metastasis	iNOS not with size or degree of differentiation eNOS not with degree of differentiation	7-18
Thyroid*	iNOS	(iNOS)	(iNOS)	IHC, ISH	Nitrotyrosine level with VEGF-D expression, lymph node metastasis	iNOS not with size, stage and outcome of tumours less eNOS in tumours total NOS with better survival	19,20
Lung	eNOS, nNOS, iNOS	eNOS, iNOS	iNOS, eNOS	IHC, RT-PCR, exhaled NO	iNOS with p53 mutation, VEGF expression and microvascular density		21-24

Breast	iNOS, eNOS, (nNOS)	eNOS, (nNOS)	iNOS, (nNOS)	IHC, WB, EPR, NOS activity	iNOS with VEGF expression, microvascular density, invasive tumours, tumour size, grade, nodal and distal metastasis, and poor survival Nitrotyrosine level with VEGF-C expression, lymph node metastasis, and poor survival	eNOS/nNOS not with microvascular density or tumour grade eNOS negatively with grade and lymph node status eNOS/iNOS not with tumour size or degree of differentiation iNOS with apoptosis and inversely with tumour cell proliferation and tumour grade	25-36
Oesophagus *	iNOS			IHC, RT- PCR	iNOS in Barrett's oesophagus, dysplasia and carcinomas iNOS with Helicobacter pylori infection, VEGF expression, microvascular density, poor differentiation, lymph node metastasis and worse survival	iNOS not with tumour size and grade, and VEGF expression eNOS with differentiation and negatively with serosal invasion	37,38
Stomach	iNOS, eNOS	eNOS	iNOS	IHC, WB, RT-PCR, NOS activity	eNOS with microvascular density and poor survival		39-44
Colon	iNOS, (cNOS)	eNOS	iNOS	IHC, WB, RT-PCR, NOS activity	iNOS with p53 mutation, VEGF expression, microvascular density, vascular invasion, and stage	iNOS not with p53 and APC mutation, lymph node metastasis, microvascular density or tumour size iNOS inversely with tumour stage and positively with survival	45-54
Pancreas	iNOS	eNOS	(iNOS)	IHC, WB,			55,56

Liver*	iNOS		IHC, RT-PCR	iNOS with COX-2 expression	iNOS not with microvascular density, apoptosis or survival	57,58
Galbladder r*	iNOS	(iNOS)	IHC	iNOS with microvascular density, liver and lymph metastasis	iNOS not with tumour size, differentiation or stage	59
Bladder	iNOS, eNOS	eNOS, (iNOS)	IHC, WB, RT-PCR, NOS activity	iNOS with recurrence	iNOS not with invasion, grade or stage eNOS not with grade or stage	60-65
Kidney	nNOS		IHC, RT-PCR, NOS activity	iNOS with cell proliferation, invasion, T-classification, metastasis, PSA, Gleason score and poor survival	nNOS expression and activity are higher in normal tissue and decrease with tumour grade	66,67
Prostate	iNOS	eNOS, (iNOS)	IHC, RT-PCR	iNOS with nodal status, grade, invasion, cell proliferation and Gleason score		68-71
Gynaecological cancer	iNOS, nNOS	eNOS	IHC, RT-PCR, NOS activity		NOS not with tumour stage	72-74
Kaposi's sarcoma	(eNOS)	eNOS	IHC			75
Melanoma	iNOS, eNOS, nNOS	eNOS, (iNOS)	IHC, WB, NB, NOS activity	iNOS with tumour progression, Bcl-2 expression and worse survival (in stage III disease)	iNOS not with disease-specific survival and inversely with subsequent distant metastasis	76-79

Mesothelio ma*	iNOS	iNOS	IHC, RT- PCR	iNOS not with apoptosis or microvascular density	80,81
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NOSs in Parenthesis were only occasionally or faintly detected.

*Data for eNOS and nNOS are not available. Localised in nerve fibres.

Abbreviations: nitric oxide (NO), NO synthase (NOS), constitutive NOS (cNOS), endothelial NOS (eNOS), inducible NOS (iNOS), neuronal NOS (nNOS), IHC, immunohistochemistry (IHC), in situ hybridization (ISH), Northern blot (NB), Western blot (WB), reverse transcription polymerase chain reaction (RT-PCR), spin-trapping electron paramagnetic resonance spectroscopy (EPR), cyclooxygenase-2 (COX-2), hypoxia inducible factor 1 α , (HIF-1 α), prostaglandin E₂, (PGE₂), prostate specific antigen (PSA), vascular endothelial growth factor (VEGF)

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