

## Differentially expressed genes between primary cancer and paired lymph node metastases predict clinical outcome of node-positive breast cancer patients

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Published online: 15 February 2007  
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### Erratum to: Breast Cancer Res Treat DOI 10.1007/s10549-006-9385-7

Unfortunately a wrong table was printed in this article.  
Please find below the correct Table 3.

As a result the text also contains incorrect information.  
Please find below the correct information:

#### Identification of Candidate Differentially Expressed Genes

Seventy-nine differentially expressed genes between primary cancers and paired lymph node metastases

were identified (Table 3), consisting of 50 genes downregulated and 29 up-regulated. The functions of these genes were related to cell migration and adhesion, extracellular matrix, cell growth, signal transduction, and metabolism, which are involved in biology process of metastasis.

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The online version of the original article can be found at <http://doi.org/10.1007/s10549-006-9385-7>

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**Table 3** Genes changed in metastases relative in corresponding primary tumors

HUGO name	GB accession	Cases	$P^*$	$P^{**}$	Cell adhesion and mobility	Extracellular matrix	Cellular growth	Cell differentiation	Signal transduction	Transcription factor	Immune response	Metabolism and catalytic activity	Transport	Other function and unknown function	
<i>Down-regulated genes (50 genes)</i>															
SFRP2	AF311912	23	6.40E-06	1.26E-03		✓		✓							
COL11A1	NM_001854	23	6.41E-04	6.32E-05	✓										
PDGFRL	NM_006207	20	6.82E-07	2.44E-09		✓									
MMP2	NM_004530	20	2.65E-06	5.03E-06		✓						✓			
CTSK	NM_000396	20	2.75E-05	1.23E-05		✓						✓			
MMP7	NM_002423	20	1.08E-03	1.18E-03		✓						✓			
ASPN	NM_017680	20	1.91E-03	1.31E-04		✓									
ITGBL1	NM_004791	19	2.73E-07	3.03E-05	✓										
OSF-2	NM_006475	19	2.29E-06	3.76E-08	✓										
COL6A1	NM_001848	18	6.63E-07	2.02E-03	✓										
FMO1	NM_002021	18	2.33E-06	1.84E-02	✓										
COL5A2	NM_000393	18	3.69E-05	1.72E-06	✓										
HTRA3	AY040094	17	6.08E-05	2.15E-04	✓										
SPOCK	NM_004598	17	6.36E-05	7.41E-04	✓										
LUM	NM_002345	17	7.32E-05	1.20E-04	✓										
SPON1	AB018305	17	9.62E-05	8.46E-06	✓										
CILP	NM_003613	17	3.48E-04	1.49E-05	✓										
LGALS1	NM_002305	16	2.05E-07	6.29E-03	✓										
	AL359052	16	2.49E-05	4.25E-03	✓										
PRSS11	NM_002775	16	1.99E-04	7.59E-06	✓										
OGN	NM_033014	16	2.41E-03	2.07E-03	✓										
ECM1	NM_004425	16	6.08E-03	1.16E-01	✓										
STEAP	NM_012449	16	4.20E-02	2.84E-04	✓										
SNAI2	BC014890	15	1.51E-06	3.39E-04	✓										
FNI	NM_002026	15	2.37E-05	6.04E-02	✓										
TNFAIP6	NM_007115	15	3.08E-05	1.82E-02	✓										
COL1A2	NM_000089	15	3.63E-05	1.02E-05	✓										
COL3A1	NM_000090	15	1.22E-04	6.75E-05	✓										
FBN1	NM_000138	15	4.53E-04	4.28E-07	✓										
CCL8	Y16645	15	1.24E-03	6.42E-02	✓										
CALU	NM_001219	15	5.50E-03	5.76E-01	✓										
CSPG2	U16306	15	9.55E-03	1.12E-04	✓										
GPX2	NM_002510	15	1.55E-02	1.62E-02	✓										
KRT15	NM_002275	15	1.93E-02	1.58E-02	✓										
RUNX2	AW469546	14	4.18E-07	3.37E-04	✓										
GRP	NM_002091	14	6.71E-05	9.51E-03	✓										
	AK022342	14	7.54E-05	2.32E-03	✓										
PCOLCE	NM_002593	14	1.37E-04	6.09E-06	✓										
TGFB3	NM_003239	14	1.97E-04	5.91E-03	✓										
COL5A1	NM_000093	14	3.60E-04	5.06E-06	✓										

Table 3 continued

HUGO name	GB accession	Cases	$P^*$	$P^{**}$	Cell adhesion and mobility	Extracellular matrix	Cell growth	Cell differentiation	Signal transduction	Transcription factor	Immune response	Metabolism and catalytic activity	Transport	Other function and unknown function
CDC45L	NM_003504	14	4.01E-04	1.72E-06	✓									✓
KRT14	NM_000526	14	4.55E-04	7.70E-03										✓
CTHRC1	BC014245	14	6.69E-04	7.19E-08					✓			✓		✓
MRC2	NM_006039	14	9.87E-04	9.43E-07								✓		✓
RIS1	AF438313	14	1.26E-03	9.17E-03					✓			✓		
FCGR3A	J04162	14	2.79E-03	3.94E-05						✓				
ABCC1	NM_004996	14	2.57E-02	7.32E-01								✓		
CKTSF1B1	NM_013372	14	4.23E-02	7.08E-05					✓					✓
NEFL	NM_006158	14	1.50E-05	1.89E-01					✓					
PIGR	AK026320	14	1.68E-02	2.04E-01		✓								
<i>Up-regulated genes (29 genes)</i>														
PDE6H	NM_006205	22	1.21E-04	1.67E-02								✓		
MS4A1	NM_021950	21	7.36E-04	8.15E-03					✓					
C7	NM_000587	21	8.48E-04	6.70E-02		✓								✓
	AF343666	20	5.13E-03	8.99E-03										
LTB	NM_002341	18	9.26E-04	6.23E-05					✓					
SELL	NM_000655	18	1.05E-03	1.12E-03										
RGS1	NM_002922	18	2.04E-03	8.27E-03										
FREB	NM_032738	17	1.98E-03	1.52E-01										
BIRC3	AF070674	17	5.91E-03	1.85E-04										
TRB@	X00437	17	1.15E-02	3.01E-04			✓							
TNFAIP3	NM_006290	17	1.85E-02	1.77E-04			✓							
PTPRC	NM_002838	17	2.94E-02	2.01E-05			✓							
DUSP2	NM_004418	16	5.69E-05	4.91E-04										
ZFP36L2	U07802	15	1.47E-03	2.26E-06						✓				✓
HBB	NM_000518	15	6.30E-03	1.78E-04										
TCL1A	NM_021966	15	6.39E-03	6.70E-03										
KLF2	NM_016270	15	1.10E-02	9.30E-03						✓				
EBI2	NM_004951	15	1.46E-02	4.55E-06										
CCL19	NM_006274	15	2.09E-02	1.49E-04							✓			
RAFTLIN	D42043	14	7.43E-04	9.71E-03										✓
CORO1A	NM_007074	14	1.56E-03	2.32E-04										
FOXO1A	NM_002015	14	4.33E-03	6.53E-05										
CR2	NM_001877	14	5.04E-03	4.73E-04						✓				
TXNIP	NM_006472	14	6.41E-03	5.83E-02										
CD48	NM_001778	14	1.08E-02	3.84E-05										
TRA@	M12959	14	1.34E-02	1.50E-05										
PDK4	AF334710	14	1.47E-02	6.61E-03										
PRG1	NM_002727	14	3.38E-02	1.29E-05										
HSPC022	NM_014029	14	4.76E-02	1.65E-03										✓

$P^*$ ,  $P$  value for paired-samples  $t$ -test of primary breast cancer and matched lymph node metastases.  $P^{**}$ ,  $P$  value for Student's  $t$ -test of "high risk group" and "low risk group"