

| gene                                 | lung meastasis | lymph node metastasis | typer-of-tumor                 | author         | title  | SOURCE                                   |
|--------------------------------------|----------------|-----------------------|--------------------------------|----------------|--|--|
| NY-BR-1                              |                | ✓                     | breast cancer                  | Varga Z        | Preferential Nuclear and Cytoplasmic NY-BR-1 Protein Expression in Primary Breast Cancer and Lymph Node Metastases                   | Clin Cancer Res 2006;12(9):2745          |
| VEGF-C/D                             |                | ✓                     | breast cancer                  | Stacker SA     | VEGF-D promotes the metastatic spread of tumor cells via the lymphatics.   | Nat Med 2001;7:186-191                   |
| (DSC2/UGT8/ITGB8/FERMT1/TFCP2L1/ANP) | ✓              |                       | breast cancer                  | Skuba M        | Induction of tumor lymphangiogenesis by VEGF-C promotes breast cancer metastasis.  | Nat Med 2001;7:192-198                   |
| IL11/CTGF/CXCR4                      | ✓              |                       | breast cancer                  | Landemaine T   | A Six-Gene Signature Predicts Breast Cancer Lung Metastasis  | Cancer Res 2008;68(15):6092-9            |
| MMP1                                 | ✓              |                       | breast cancer                  | Minn AJ        | Distinct organ-specific metastatic potential of individual breast cancer cells and primary tumors                                    | J. Clin. Invest. 2005, 115:44-55.        |
| LAMC2                                | ✓              | ✓                     | bladder cancer                 | Smith SC       | Profiling Bladder Cancer Organ Site-Specific Metastasis Identifies LAMC2 as a Novel Biomarker of Hematogenous Dissemination          | Am J Pathol 2009, 174:371-379;           |
| EgCAM                                | ✓              |                       |                                | Kischel P      | Cell Membrane Proteomic Analysis Identifies Proteins Differentially Expressed in Osteotropic Human Breast Cancer Cells               | Neoplasia 2008, 10: 1014-1020            |
| αv (CD51) β3 (CD61) integrins        |                |                       |                                |                |  |  |
| Prohibitin                           |                |                       |                                |                |  |  |
| MRP-1                                | ✓              |                       | breast cancer                  | Bos PD         | Genes that mediate breast cancer metastasis to the brain   | Nature 2009; 459(7249): 1005-1009.       |
| cyclooxygenase COX2                  | ✓              |                       |                                |                |  |  |
| HBEF                                 | ✓              |                       |                                |                |  |  |
| α2,6-sialyltransferase ST6GALNAC5    | ✓              |                       |                                |                |  |  |
| ANGPTL4                              | ✓              |                       |                                |                |  |  |
| latent TGF-β-binding protein (LTBP1) | ✓              |                       |                                |                |  |  |
| fascin-1 (FSCN1)                     | ✓              |                       |                                |                |  |  |
| SPARC                                | ✓              |                       | breast cancer                  | Lu X           | Efficient acquisition of dual metastasis organotropism to bone and lung through stable spontaneous fusion between MDA-MB-231 variant | PNAS 2009, 106 ( 23 ) :9385-9390         |
| IL13RA2                              | ✓              |                       |                                |                |  |  |
| VCAM1                                | ✓              |                       |                                |                |  |  |
| Id                                   | ✓              |                       |                                |                |  |  |
| MMP1                                 | ✓              |                       |                                |                |  |  |
| IL11                                 | ✓              |                       |                                |                |  |  |
| CXCR4                                | ✓              |                       |                                |                |  |  |
| ADAMTS1                              | ✓              |                       |                                |                |  |  |
| MCAM                                 | ✓              |                       |                                |                |  |  |
| CTGF                                 | ✓              |                       |                                |                |  |  |
| PTEN                                 |                |                       | prostatic cancer/bladder cance | Wu Z           | The role of PTEN in prostate cancer cell tropism to the bone micro-environment   | Carcinogenesis 2007, 28 ( 7 ) :1393-1400 |
| CD73                                 |                | ✓                     | breast cancer                  | Lee H          | GENE EXPRESSION PROFILING OF TUMOR XENOGRAFTS:IN VIVO ANALYSIS OF ORGAN-SPECIFIC METASTASIS  | Int J Cancer 2003, 107, 528-534          |
| Integrin, alpha 1 H68922 3.8         |                | ✓                     |                                |                |  |  |
| Pleurospelin                         |                | ✓                     |                                |                |  |  |
| αv-integrin                          |                | ✓                     | prostatic cancer               | van der Hest G | Targeting of αv-Integrins in Stem/Progenitor Cells and Supportive Microenvironment Impairs Bone Metastasis in Human Prostate Cancer  | Neoplasia 2011 13, 516-525               |