

## REFERENCES

- [1] Feller L, Lemmer J. Oral squamous cell carcinoma: epidemiology, clinical presentation and treatment. *J Cancer Ther.* 2012; 3: 263-8
- [2] Zini A, Czerninski R, Sgan-Cohen HD. Oral cancer over four decades: epidemiology, trends, histology, and survival by anatomical sites. *J Oral Pathol Med.* 2010; 39(4): 299-305.
- [3] Ma'aita JK. Oral cancer in Jordan: a retrospective study of 118 patients. *Croat Med J.* 2000; 41(1): 64-9.
- [4] Duffy MJ, Mullooly M, O'Donovan N, et al. The ADAMs family of proteases: new biomarkers and therapeutic targets for cancer? *Clin Proteomics.* 2011; 8(1): 9.
- [5] Vincent-Chong VK, Anwar A, Karen-Ng LP, et al. Genome wide analysis of chromosomal alterations in oral squamous cell carcinomas revealed over expression of MGAM and ADAM9. *PLoS One.* 2013; 8(2): e54705.
- [6] Uehara E, Shiiba M, Shinozuka K, et al. Upregulated expression of ADAM12 is associated with progression of oral squamous cell carcinoma. *Int J Oncol.* 2012; 40(5): 1414-22.
- [7] Ambatipudi S, Gerstung M, Gowda R, et al. Genomic profiling of advanced-stage oral cancers reveals chromosome 11q alterations as markers of poor clinical outcome. *PLoS One.* 2011; 6(2): e17250.
- [8] Ferlay J, Soerjomataram I, Dikshit R, et al. Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBOCAN 2012. *Int J Cancer.* 2015; 136(5): E359-E86.
- [9] Neville BW, Damm DD, Allen CM, Bouquot J. *Oral and Maxillofacial Pathology.* 3rd ed. Canada: Elsevier Health Sciences; 2009.
- [10] Does A, Johnson NA, Thiel T. *Cell Biology and Cancer.* Saint Louis, Missouri: Anenberg Media; 1997-2009. 119-33 p.
- [11] Devi PU. Basics of carcinogenesis. *Health Administrators.* 2005; 17: 16-24.

- [12] Vincent TL, Gatenby RA. An evolutionary model for initiation, promotion, and progression in carcinogenesis. *Int J Oncol.* 2008; 32(4): 729-37.
- [13] Alberts B, Johnson A, Lewis J, et al. The Preventable Causes of Cancer. *Mol Biol Cell.* 4th ed. New York: Garland Science; 2002.
- [14] Iamaroon A. Oral Cancer. Chiangmai: Faculty of Dentistry, Chiangmai University; 2007. 246 p.
- [15] Choi S, Myers JN. Molecular pathogenesis of oral squamous cell carcinoma: implications for therapy. *J Dent Res.* 2008; 87(1): 14-32.
- [16] Hanahan D, Weinberg RA. The hallmarks of cancer. *Cell.* 2000; 100(1): 57-70.
- [17] Kumar V, Abbas AK, Fausto N, Aster J. *Robbins & Cotran Pathologic Basis of Disease.* 8th ed. Philadelphia, USA: Elsevier Health Sciences; 2010.
- [18] Chen HH, Yu CH, Wang JT, et al. Expression of human telomerase reverse transcriptase (hTERT) protein is significantly associated with the progression, recurrence and prognosis of oral squamous cell carcinoma in Taiwan. *Oral Oncol.* 2007; 43(2): 122-9.
- [19] Cohen RF, Contrino J, Spiro JD, et al. Interleukin-8 expression by head and neck squamous cell carcinoma. *Arch Otolaryngol Head Neck Surg.* 1995; 121(2): 202-9.
- [20] Kaur G, Carnelio S, Rao N, Rao L. Expression of E-cadherin in primary oral squamous cell carcinoma and metastatic lymph nodes: an immunohistochemical study. *Indian J Dent Res.* 2009; 20(1): 71-6.
- [21] Hashimoto T, Soeno Y, Maeda G, et al. Progression of oral squamous cell carcinoma accompanied with reduced E-cadherin expression but not cadherin switch. *PLoS One.* 2012; 7(10): e47899.
- [22] Tsantoulis PK, Kastrinakis NG, Tourvas AD, Laskaris G, Gorgoulis VG. Advances in the biology of oral cancer. *Oral Oncol.* 2007; 43(6): 523-34.
- [23] Larsen SR, Johansen J, Sorensen JA, Krogdahl A. The prognostic significance of histological features in oral squamous cell carcinoma. *J Oral Pathol Med.* 2009; 38(8): 657-62.
- [24] Fang KH, Kao HK, Cheng MH, et al. Histological differentiation of primary oral squamous cell carcinomas in an area of betel quid chewing prevalence. *Otolaryngol Head Neck Surg.* 2009; 141(6): 743-9.

- [25] Yagami-Hiromasa T, Sato T, Kurisaki T, et al. A metalloprotease-disintegrin participating in myoblast fusion. *Nature*. 1995; 377(6550): 652-6.
- [26] Roghani M, Becherer JD, Moss ML, et al. Metalloprotease-disintegrin MDC9: intracellular maturation and catalytic activity. *J Biol Chem*. 1999; 274(6): 3531- 40.
- [27] Izumi Y, Hirata M, Hasuwa H, et al. A metalloprotease-disintegrin, MDC9/meltrin-gamma/ADAM9 and PKCdelta are involved in TPA-induced ectodomain shedding of membrane-anchored heparin-binding EGF-like growth factor. *EMBO J*. 1998; 17(24): 7260-72.
- [28] Grace JA, Herath CB, Mak KY, Burrell LM, Angus PW. Update on new aspects of the renin-angiotensin system in liver disease: clinical implications and new therapeutic options. *Clin Sci (Lond)*. 2012; 123(4): 225-39.
- [29] Seals DF, Courtneidge SA. The ADAMs family of metalloproteases: multidomain proteins with multiple functions. *Genes Dev*. 2003; 17(1): 7-30.
- [30] Reiss K, Saftig P. The "a disintegrin and metalloprotease" (ADAM) family of sheddases: physiological and cellular functions. *Semin Cell Dev Biol*. 2009; 20(2): 126-37.
- [31] Zigrino P, Steiger J, Fox JW, et al. Role of ADAM-9 disintegrin-cysteine-rich domains in human keratinocyte migration. *J Biol Chem*. 2007; 282(42): 30785-93.
- [32] Hooper NM, Lendeckel U. The ADAM Family of Protease. Netherlands: Springer; 2005.
- [33] Olson GE, Winfrey VP, Matrisian PE, NagDas SK, Hoffman LH. Blastocyst-dependent upregulation of metalloproteinase/disintegrin MDC9 expression in rabbit endometrium. *Cell Tissue Res*. 1998; 293(3): 489-98.
- [34] Kim J, Koog MJ, Bae IH, Kim H. Expression of ADAM-8, 9, 10, 12, 15, 17 and ADAMTS-1 genes in mouse uterus during periimplantation period. *Kor J Fertil Steril*. 2005; 33(1): 33-45.
- [35] Weskamp G, Cai H, Brodie TA, et al. Mice lacking the metalloprotease-disintegrin MDC9 (ADAM9) have no evident major abnormalities during development or adult life. *Mol Cell Biol*. 2002; 22(5): 1537-44.

- [36] Carl-McGrath S, Lendeckel U, Ebert M, Rocken C. Ectopeptidases in tumour biology: a review. *Histol Histopathol.* 2006; 21(12): 1339-53.
- [37] Guaiquil V, Swendeman S, Yoshida T, et al. ADAM9 is involved in pathological retinal neovascularization. *Mol Cell Biol.* 2009; 29(10): 2694-703.
- [38] Sung S-Y. ADAM9 (ADAM metallopeptidase domain 9 (meltrin gamma)). *Atlas Genet Cytogenet Oncol Haematol.* 2010; 14(3): 270-4.
- [39] Mochizuki S, Okada Y. ADAMs in cancer cell proliferation and progression. *Cancer Sci.* 2007; 98(5): 621-8.
- [40] Mauch C, Zamek J, Abety AN, et al. Accelerated wound repair in ADAM-9 knockout animals. *J Invest Dermatol.* 2010; 130(8): 2120-30.
- [41] Sonoda K, Kato K. A disintegrin and metalloproteinase 9 is involved in ectodomain shedding of receptor-binding cancer antigen expressed on SiSo cells. *Biomed Res Int.* 2014; 2014: 13.
- [42] Arribas J, Bech-Serra JJ, Santiago-Josefat B. ADAMs, cell migration and cancer. *Cancer Metastasis Rev.* 2006; 25(1): 57-68.
- [43] Lendeckel U, Kohl J, Arndt M, et al. Increased expression of ADAM family members in human breast cancer and breast cancer cell lines. *J Cancer Res Clin Oncol.* 2005; 131(1): 41-8.
- [44] Tao K, Qian N, Tang Y, et al. Increased expression of a disintegrin and metalloprotease-9 in hepatocellular carcinoma: implications for tumor progression and prognosis. *Jpn J Clin Oncol.* 2010; 40(7): 645-51.
- [45] Kim JM, Jeung H-C, Rha SY, et al. The effect of disintegrin-metalloproteinase ADAM9 in gastric cancer progression. *Mol Cancer Ther.* 2014; 13(12): 3074-85.
- [46] Li J, Ji Z, Qiao C, Qi Y, Shi W. Overexpression of ADAM9 promotes colon cancer cells invasion. *J Invest Surg.* 2013; 26(3): 127-33.
- [47] Fritzsche FR, Wassermann K, Jung M, et al. ADAM9 is highly expressed in renal cell cancer and is associated with tumour progression. *BMC Cancer.* 2008; 8: 179.
- [48] Zhang J, Qi J, Chen N, et al. High expression of a disintegrin and metalloproteinase-9 predicts a shortened survival time in completely resected stage I non-small cell lung cancer. *Oncol Lett.* 2013; 5(5): 1461-6.

- [49] Fritzsche FR, Jung M, Tolle A, et al. ADAM9 expression is a significant and independent prognostic marker of PSA relapse in prostate cancer. *Eur Urol.* 2008; 54(5): 1097-108.
- [50] Zubel A, Flechtenmacher C, Edler L, Alonso A. Expression of ADAM9 in CIN3 lesions and squamous cell carcinomas of the cervix. *Gynecol Oncol.* 2009; 114(2): 332-6.
- [51] Micocci KC, Martin AC, Montenegro Cde F, et al. ADAM9 silencing inhibits breast tumor cell invasion in vitro. *Biochimie.* 2013; 95(7): 1371-8.
- [52] Shintani Y, Higashiyama S, Ohta M, et al. Overexpression of ADAM9 in non-small cell lung cancer correlates with brain metastasis. *Cancer Res.* 2004; 64(12): 4190-6.
- [53] Lin CY, Chen HJ, Huang CC, et al. ADAM9 promotes lung cancer metastases to brain by a plasminogen activator-based pathway. *Cancer Res.* 2014; 74(18): 5229-43.
- [54] Peduto L, Reuter VE, Shaffer DR, Scher HI, Blobel CP. Critical function for ADAM9 in mouse prostate cancer. *Cancer Res.* 2005; 65(20): 9312-9.
- [55] Maneerat D, Chotjumlong P, Sastraruji T, et al. An inverse relationship between a disintegrin and metalloproteinase-9 and proliferating cell nuclear antigen expression in oral lichen planus. *Chulalongkorn University Dental Journal.* 2015; 38: 1-12.
- [56] Pirker R, Pereira JR, von Pawel J, et al. EGFR expression as a predictor of survival for first-line chemotherapy plus cetuximab in patients with advanced non-small-cell lung cancer: analysis of data from the phase 3 FLEX study. *Lancet Oncol.* 2012; 13(1): 33-42.
- [57] Liu R, Gu J, Jiang P, et al. DNMT1-microRNA126 epigenetic circuit contributes to esophageal squamous cell carcinoma growth via ADAM9-EGFR-AKT signaling. *Clin Cancer Res.* 2015; 21(4): 854-63.
- [58] Krisanaprakornkit S, Iamaroon A. Epithelial-mesenchymal transition in oral squamous cell carcinoma. *Oncology.* 2012; 2012: 10.
- [59] Iamaroon A, Krisanaprakornkit S. Overexpression and activation of Akt2 protein in oral squamous cell carcinoma. *Oral Oncol.* 2009; 45(10): e175-9.

- [60] Krisanaprakornkit S, Kimball JR, Dale BA. Regulation of human  $\beta$ -defensin-2 in gingival epithelial cells: The involvement of mitogen-activated protein kinase pathways, but not the NF- $\kappa$ B transcription factor family. *J Immunol.* 2002; 168:1 316-24.
- [61] Chang L, Gong F, Cai H, Li Z, Cui Y. Combined RNAi targeting human Stat3 and ADAM9 as gene therapy for non-small cell lung cancer. *Oncol Lett.* 2016; 11(2): 1242-50.
- [62] Josson S, Anderson CS, Sung S-Y, et al. Inhibition of ADAM9 expression induces epithelial phenotypic alterations and sensitizes human prostate cancer cells to radiation and chemotherapy. *Prostate.* 2011; 71(3): 232-40.
- [63] Chen C-M, Hsieh Y-H, Hwang J-M, et al. Fisetin suppresses ADAM9 expression and inhibits invasion of glioma cancer cells through increased phosphorylation of ERK1/2. *Tumor Biology.* 2015; 36(5): 3407-15.
- [64] Tao K, Qian N, Tang Y, et al. Increased expression of a disintegrin and metalloprotease-9 in hepatocellular carcinoma: implications for tumor progression and prognosis. *Jpn J Clin Oncol.* 2010; 40(7): 645-51.
- [65] Shaker M, Yokoyama Y, Mori S, et al. Aberrant expression of disintegrin-metalloprotease proteins in the formation and progression of uterine cervical cancer. *Pathobiology.* 2011; 78(3): 149-61.
- [66] Stokes A, Joutsa J, Ala-Aho R, et al. Expression profiles and clinical correlations of degradome components in the tumor microenvironment of head and neck squamous cell carcinoma. *Clin Cancer Res.* 2010; 16(7): 2022-35.
- [67] Peduto L. ADAM9 as a potential target molecule in cancer. *Curr Pharm Des.* 2009; 15(20): 2282-7.
- [68] Lindenblatt Rde C, Martinez GL, Silva LE, et al. Oral squamous cell carcinoma grading systems-analysis of the best survival predictor. *J Oral Pathol Med.* 2012; 41(1): 34-9.
- [69] Bikle DD, Xie Z, Tu CL. Calcium regulation of keratinocyte differentiation. *Expert Rev Endocrinol Metab.* 2012; 7(4): 461-72.
- [70] Oda D, Dale BA, Bourekis G. Human oral epithelial cell culture. II. Keratin expression in fetal and adult gingival cells. *In Vitro Cell Dev Biol.* 1990; 26(6): 596-603.

- [71] Singh B, Schneider M, Knyazev P, Ullrich A. UV-induced EGFR signal transactivation is dependent on proligand shedding by activated metalloproteases in skin cancer cell lines. *Int J Cancer.* 2009; 124(3): 531-9.
- [72] Archewa P, Pata S, Chotjumlong P, et al. Akt2 and p-Akt overexpression in oral cancer cells is due to a reduced rate of protein degradation. *J Investig Clin Dent.* 2015; 0: 1-8.



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่  
Copyright© by Chiang Mai University  
All rights reserved