Informácie a komentáre

KARCINÓM PRSNÍKA

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Decreased methylation in the SNAI2 and ADAM23 genes associated with de-differentiation and haematogenous dissemination in breast cancers

BMC Cancer. 2018 Sep 6;18(1):875.

Background: In breast cancer (BC), deregulation of DNA methylation leads to aberrant expressions and functions of key regulatory genes. In our study, we investigated the relationship between the methylation profiles of genes associated with cancer invasivity and clinico-pathological parameters. In detail, we studied differences in the methylation levels between BC patients with haematogenous and lymphogenous cancer dissemination.

Methods: We analysed samples of primary tumours (PTs), lymph node metastases (LNMs) and peripheral blood cells (PBCs) from 59 patients with sporadic disseminated BC. Evaluation of the DNA methylation levels of six genes related to invasivity, ADAM23, uPA, CXCL12, TWIST1, SNAI1 and SNAI2, was performed by pyrosequencing.

Results: Among the cancer-specific methylated genes, we found lower methylation levels of the SNAI2 gene in histologic grade 3 tumours (OR = 0.61; 95% CI, 0.39-0.97; P = 0.038) than in fully or moderately differentiated cancers. We also evaluated the methylation profiles in patients with different cancer cell dissemination statuses (positivity for circulating tumour cells (CTCs) and/or LNMs). We detected the significant association between reduced DNA methylation of ADAM23 in PTs and presence of CTCs in the peripheral blood of patients (OR = 0.45; 95% CI, 0.23-0.90; P = 0.023).

Conclusion: The relationships between the decreased methylation levels of the SNAI2 and ADAM23 genes and cancer de-differentiation and haematogenous dissemination, respectively, indicate novel functions of those genes in the invasive processes. After experimental validation of the association between the lower values of SNAI2 and ADAM23 methylation and clinical features of aggressive BCs, these methylation profiles could improve the management of metastatic disease.

Oravcova I, Mikuskova E, Leitnerova M, Gyarfas J, Mlcakova A, Szepe P, Plank L, Demitrovicova L, Mikudova V, Cingelova S, Mego M, Drgona L.

A unique clinical presentation of de novo acute promyelocytic leukemia as a myeloid sarcoma of the breast

Int J Hematol. 2018 Jun 21.

Myeloid sarcoma is a rare presentation of acute leukemia as a solid tumor at various extramedullary sites. It may present concurrently, before or after the onset of systemic bone marrow leukemia. Unusual clinical localization may lead to misdiagnosis, or delayed diagnosis and treatment. We describe the first case, to our knowledge, of de novo myeloid sarcoma of the breast confirmed as acute promyelocytic leukemia. Immunohistochemical analysis, flow cytometry, fluorescent in situ hybridization analysis and molecular analysis using RQ-PCR of tissue samples should be routine in determining the correct diagnosis in this setting.

PODPORNÁ LIEČBA

Robert-Gangneux F, Meroni V, Dupont D, Botterel F, Garcia JMA, Brenier-Pinchart MP, Accoceberry I, Akan H, Abbate I, Boggian K, Bruschi F, Carratalà J, David M, **Drgona L**, Djurković-Djaković O, Farinas MC, Genco F, Gkrania-Klotsas E, Groll AH, Guy E, Hirzel C, Khanna N, Kurt Ö, Junie LM, Lazzarotto T, Len O, Mueller NJ, Munoz P, Pana ZD, Roilides E, Stajner T, van Delden C, Villena I, Pelloux H, Manuel O.

Toxoplasmosis in Transplant Recipients, Europe, 2010-2014

Emerg Infect Dis. 2018 Aug;24(8):1497-1504.

Transplantation activity is increasing, leading to a growing number of patients at risk for toxoplasmosis. We reviewed toxoplasmosis prevention practices, prevalence, and outcomes for hematopoietic stem cell transplant (HSCT) and solid organ transplant (SOT; heart, kidney, or liver) patients in Europe. We collected electronic data on the transplant population and prevention guidelines/regulations and clinical data on toxoplasmosis cases diagnosed during 2010-2014. Serologic pretransplant screening of allo-hematopoietic stem cell donors was performed in 80% of countries, screening of organ donors in 100%. SOT recipients were systematically screened in 6 countries. Targeted anti-Toxoplasma chemoprophylaxis was heterogeneous. A total of 87 toxoplasmosis cases were recorded (58 allo-HSCTs, 29 SOTs). The 6-month survival rate was lower among Toxoplasma-seropositive recipients and among allo-hematopoietic stem cell and liver recipients. Chemoprophylaxis improved outcomes for SOT recipients. Toxoplasmosis remains associated with high mortality rates among transplant recipients. Guidelines are urgently needed to standardize prophylactic regimens and optimize patient management.

GASTROINTESTINÁLNE MALIGNITY

Raymond E, Kulke M, Qin SK, Yu X, Schenker M, Cubillo A, Lou W, Tomasek J, Thiis-Evensen E, Xu JM, Croitoru A, Khasraw M, Sedlackova E, Borbath I, Ruff P, Oberstein P, Ito T, Jia L, Hammel P, Shen L, Shrikhande SV, Shen Y, **Sufliarsky J**, Khan G, Morizane C, Galdy S, Khosravan R, Fernandez K, Rosbrook B, Fazio N.

Efficacy and Safety of Sunitinib in Patients With Well-Differentiated Pancreatic Neuroendocrine Tumours

Neuroendocrinology. 2018 Jul 10.

Background: In a phase III study, sunitinib led to a significant increase in progression- free survival (PFS) vs. placebo in patients with pancreatic neuroendocrine tumours (panNETs). This study was a post-marketing commitment to support the phase III data.

Methods: In this ongoing, open-label, phase IV trial (NCT01525550), patients with progressive, advanced unresectable/metastatic, well-differentiated panNETs received continuous sunitinib 37.5 mg once daily. Eligibility criteria were similar to the phase III study. Primary endpoint was investigator-assessed PFS per Response Evaluation Criteria in Solid Tumours v1.0 (RECIST). Other endpoints included PFS per Choi criteria, overall survival (OS), objective response rate (ORR), and adverse events (AEs).

Results: Sixty-one treatment-naive and 45 previously treated patients received sunitinib. By 19 March 2016, 82 (77%) patients had discontinued treatment, mainly due to disease progression. Median treatment duration was 11.7 months. Investigator-assessed median PFS per RECIST (95% confidence interval [CI]) was 13.2 months (10.9-16.7): 13.2 (7.4-16.8) and 13.0 (9.2-20.4) in treatment-naive and previously treated patients, respectively. ORR (95% CI) per RECIST was 24.5% (16.7-33.8) in the total population: 21.3% (11.9-33.7) in treatment-naive and 28.9% (16.4-44.3) in previously treated patients. Median OS, although not yet mature, was 37.8 months (95% CI, 33.0-not estimable). Most common treatment-related AEs were neutropenia (53.8%), diarrhoea (46.2%), and leukopenia (43.4%).

Conclusions: This phase IV trial confirms sunitinib as an efficacious and safe treatment option in patients with advanced/metastatic, well-differentiated, unresectable panNETs,and supports the phase III study outcomes. AEs were consistent with the known safety profile of sunitinib.

GENITOURINÁRNE MALIGNITY

Honecker F, Aparicio J, Berney D, Beyer J, Bokemeyer C, Cathomas R, Clarke N, Cohn-Cedermark G, Daugaard G, Dieckmann KP, Fizazi K, Fosså S, Germa-Lluch JR, Giannatempo P, Gietema JA, Gillessen S, Haugnes HS, Heidenreich A, Hemminki K, Huddart R, Jewett MAS, Joly F, Lauritsen J, Lorch A, Necchi A, Nicolai N, Oing C,

Oldenburg J, **Ondruš D**, Papachristofilou A, Powles T, Sohaib A, Ståhl O, Tandstad T, Toner G, Horwich A.

ESMO Consensus Conference on testicular germ cell cancer: diagnosis, treatment and follow-up

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The European Society for Medical Oncology (ESMO) consensus conference on testicular cancer was held on 3-5 November 2016 in Paris, France. The conference included a multidisciplinary panel of 36 leading experts in the diagnosis and treatment of testicular cancer (34 panel members attended the conference; an additional two panel members [CB and K-PD] participated in all preparatory work and subsequent manuscript development). The aim of the conference was to develop detailed recommendations on topics relating to testicular cancer that are not covered in detail in the current ESMO Clinical Practice Guidelines (CPGs) and where the available level of evidence is insufficient. The main topics identified for discussion related to: (1) diagnostic work-up and patient assessment; (2) stage I disease; (3) stage II-III disease; (4) post-chemotherapy surgery, salvage chemotherapy, salvage and desperation surgery and special topics; and (5) survivorship and follow-up schemes. The experts addressed questions relating to one of the five topics within five working groups. Relevant scientific literature was reviewed in advance. Recommendations were developed by the working groups and then presented to the entire panel. A consensus vote was obtained following whole-panel discussions, and the consensus recommendations were then further developed in post-meeting discussions in written form. This manuscript presents the results of the expert panel discussions, including the consensus recommendations and a summary of evidence supporting each recommendation. All participants approved the final manuscript.