

# Publikujeme v zahraničí

Onkológia (Bratisl.), 2019;14(4):XX-XX

## GENITOURINÁRNE MALIGNITY

**Hapakova N, Sestakova Z, Holickova A, Hurbanova L, Miskovska V, Chovanec M, Rejlekova K, Svetlovska D, Kalavska K, Obertova J, Palacka P, Sycova-Mila Z, Mardiak J, Chovanec M, Mego M.**

**High Endogenous DNA Damage Levels Predict Hematological Toxicity in Testicular Germ Cell Tumor Patients Treated With First-Line Chemotherapy Clin Genitourin Cancer. 2019 Jun 13.**

**Background:** Testicular germ cell tumors (TGCTs) are an excellent example of chemosensitive disease. However, cisplatin-based chemotherapy has significant side effects, including myelosuppression. Previously, we found endogenous DNA damage level in peripheral blood mononuclear cells (PBMCs) to be an independent prognostic marker. In this study, we tested the hypothesis that patients with high endogenous DNA damage levels in PBMCs have an increased risk of developing hematological toxicity.

**Patients and methods:** One hundred twenty chemotherapy-naive TGCT patients treated in the National Cancer Institute and the St Elisabeth Cancer Institute in Bratislava, Slovakia, from 2012 to 2018 were enrolled. All patients received platinum-based chemotherapy with granulocyte colony stimulating factor support. On the day of starting treatment, we measured the DNA damage levels in PBMCs using the comet assay. We used the cutoff level of 5.25, a value previously reported to stratify patients on the basis of their prognosis. We monitored hematological toxicity during the first cycle of chemotherapy. The mean and standard error of the mean were calculated for all variables.

**Results:** Patients with high DNA damage levels (>5.25) had more significant hematological toxicity with significantly lower nadir white blood cell count ( $P = .001$ ), absolute neutrophil count ( $P = .013$ ) and absolute lymphocyte count (ALC;  $P < .001$ ). ALCs on day 0 ( $P = .005$ )

and day 22 ( $P = .046$ ) were also significantly lower in patients with high DNA damage levels.

**Conclusion:** This study shows that higher endogenous DNA damage levels correlate with increased risk of hematological toxicity in TGCT patients. Hence, the DNA damage levels can be used to select patients for closer monitoring because of a higher risk of acute chemotherapy-related complications.

## GYNEKOLOGICKÉ MALIGNITY

**Ray-Coquard I, Cibula D, Mirza MR, Reuss A, Ricci C, Colombo N, Koch H, Goffin F, González-Martin A, Ottevanger PB, Baumann K, Bjørge L, Lesoin A, Burges A, Rosenberg P, Gropp-Meier M, Harrela M, Harter P, Frenel JS, Minarik T, Pisano C, Hasenburg A, Merger M, du Bois A; AGO Study Group-led GCIG/ENGOT Intergroup Consortium.**

**Final results from GCIG/ENGOT/AGO-OVAR 12, a randomised placebo-controlled phase III trial of nintedanib combined with chemotherapy for newly diagnosed advanced ovarian cancer Int J Cancer. 2019 Aug 5.**

AGO-OVAR 12 investigated the effect of adding the oral triple angiokinase inhibitor nintedanib to standard front-line chemotherapy for advanced ovarian cancer. At the primary analysis, nintedanib demonstrated significantly improved progression-free survival (PFS; primary end point) compared with placebo. We report final results, including overall survival (OS). Patients with primary debulked International Federation of Gynecology and Obstetrics (FIGO) stage IIB-IV newly diagnosed ovarian cancer were randomised 2:1 to receive carboplatin (area under the curve 5 or 6) plus paclitaxel (175 mg/m<sup>2</sup>) on day 1 every 3 weeks for six cycles combined with either nintedanib 200 mg or placebo twice daily on days 2-21 every 3 weeks for up to 120 weeks. Between December 2009 and July 2011, 1366 patients were randomised (911 to nin-

tedanib, 455 to placebo). Disease was considered as high risk (FIGO stage III with >1 cm residuum, or any stage IV) in 39%. At the final analysis, 605 patients (44%) had died. There was no difference in OS (hazard ratio 0.99, 95% confidence interval [CI] 0.83-1.17,  $p = 0.86$ ; median 62.0 months with nintedanib versus 62.8 months with placebo). Subgroup analyses according to stratification factors, clinical characteristics and risk status showed no OS difference between treatments. The previously reported PFS improvement seen with nintedanib did not translate into an OS benefit in the non-high-risk subgroup. Updated PFS results were consistent with the primary analysis (hazard ratio 0.86, 95% CI 0.75-0.98;  $p = 0.029$ ) favouring nintedanib. The safety profile was consistent with previous reports.

## Suportívna liečba

### Abstrakty a príspevky z konferencií

**Michal Mego, Daniela Svetlovska, Michal Chovanec, Katarina Rejlekova, Jana Obertova, Patrik Palacka, Zuzana Sycova-Mila, Ugo De Giorgi, Jozef Mardiak**

**Phase II study of avelumab in multiple relapsed/refractory testicular germ cell cancer**

**J Clin Oncol 37, 2019 (suppl; abstr e16045), ASCO 2019**

**Patrik Palacka, Zuzana Sestakova, Andrea Holickova, Katarina Kalavska, Katarina Rejlekova, Boris Kollárik, Michal Chovanec, Jana Obertova, Zuzana Sycova-Mila, Valentina De Angelis, Jan Slopovsky, Daniela Svetlovska, Michal Mego, Miroslav Chovanec**

**Endogenous DNA damage levels in peripheral blood mononuclear cells in patients with muscle-infiltrating urothelial bladder carcinoma**

**J Clin Oncol 37, 2019 (suppl; abstr e16020), ASCO 2019**

Michal Mego, Nikola Hapakova, Zuzana Sestakova, Andrea Holickova, Vera Miskovska, Michal Chovanec, Katarina Rejlekova, Daniela Svetlovska, Katarina Kalavska, Jana Obertova, Patrik Palacka, Valentina De Angelis, Zuzana Sycova-Mila, Jozef Mardiak, Miroslav Chovanec  
**High DNA damage levels to predict hematologic toxicity in testicular germ cell tumor (TGCT) patients treated with first-line chemotherapy**  
J Clin Oncol 37, 2019 (suppl; abstr e16055), ASCO 2019

Michal Chovanec, Lucia Vasilkova, Lucia Petrikova, Jana Obertova, Patrik Palacka, Katarina Rejlekova, Zuzana Sycova-Mila, Nikola Hapakova, Valentina De Angelis, Katarina Kalavska, Daniela Svetlovska, Beata Mladosevicova, Jozef Mardiak, Michal Mego  
**Long-term sexual impairment in relationship with metabolic health in testicular germ-cell tumor survivors**  
J Clin Oncol 37, 2019 (suppl; abstr e16060), ASCO 2019

Michal Chovanec, Katarina Rejlekova, Zuzana Sycova-Mila, Jana Obertova, Patrik Palacka, Nikola Hapakova, Valentina De Angelis, Katarina Kalavska, Daniela Svetlovska, Daniel Pindak, Jozef Mardiak, Michal Mego  
**Improved outcomes in testicular germ cell tumor patients treated at the referral center in Slovakia in the last decade**  
J Clin Oncol 37, 2019 (suppl; abstr e16059), ASCO 2019