

Literatura ACTA MEDICINAE 3/2017 Kazuistiky v onkologii a hematookologii

- 2 **První a druhá linie léčby metastatického HER2 pozitivního karcinomu prsu**
doc. MUDr. Petra Tesařová, CSc. Onkologická klinika 1. LF UK a VFN, Praha
- 2 **Pacientka s generalizovaným hormonálně dependentním tumorem prsu s hormonální rezistencí na terapii Afinitorem**
MUDr. Iva Priester | MUDr. Peter Priester Klinika onkologie a radioterapie FN Hradec Králové
- 2 **Bevacizumab v kombinaci s chemoterapií u pacientky s recidivou karcinomu ovaria rezistentního vůči platině**
MUDr. Markéta Bednaříková Interní hematologická a onkologická klinika LF MU a FN Brno
MUDr. Vít Weinberger, Ph.D. Gynekologicko-porodnická klinika LF MU a FN Brno
MUDr. Renata Koukalová Oddělení nukleární medicíny MOÚ, Brno
- 2 **Léčba nemalobuněčného karcinomu plic Xalkori**
MUDr. Leona Koubková Pneumologická klinika 2. LF UK a FN Motol, Praha
- 3 **Umírají naši pacienti na podvýživu?**
MUDr. Štěpán Tuček, Ph.D. Klinika komplexní onkologické péče, Masarykův onkologický ústav a LF MU, Brno
- 3 **Pacientka s NSCLC léčeným ve druhé linii pembrolizumabem**
MUDr. Leona Koubková Pneumologická klinika 2. LF UK a FN Motol, Praha
- 3 **Alternativní dávkování sunitinibu v režimu 2 + 1**
doc. MUDr. Tomáš Büchler, Ph.D. Onkologická klinika 1. LF UK a Thomayerovy nemocnice, Praha
- 3 **Tapentadol v léčbě polymorbidních nemocných s nádory plic**
doc. MUDr. Luboš Holubec, Ph.D., MBA Oddělení klinické onkologie Nemocnice Na Homolce, Praha
Ing. et Ing. Jiří Polívka, Ph.D. Biomedicínské centrum LF UK v Plzni
MUDr. Martin Šafanda Oddělení klinické onkologie Nemocnice Na Homolce, Praha
- 4 **Zkušenosti s léčbou nemocného s lokálně pokročilým bazaliomem preparátem Erivedge**
MUDr. Martina Zimovjanová, Ph.D. Onkologická klinika VFN a 1. LF UK, Praha
- 4 **Pacient s typickým obrazem myelodysplastického syndromu s neobvyklým průběhem navozeným použitím nejnovějších možností terapie**
MUDr. Anna Jonášová, Ph.D. I. interní klinika – klinika hematologie, 1. LF UK a VFN, Praha
- 5 **Nivolumab v léčbě nemocných s relabujícím nebo refrakterním Hodgkinovým lymfomem před a po alogenní transplantaci krvetvorných buněk**
MUDr. Jozef Michalka | MUDr. Zdeněk Král, CSc. | doc. MUDr. Andrea Janíková, Ph.D.
Interní hematologická a onkologická klinika FN Brno a LF MU, Brno
- 5 **Dasatinib – účinná léčba chronické myeloidní leukemie a plánované těhotenství**
MUDr. Hana Klamová, CSc. Ústav hematologie a krevní transfuze, Ústav klinické a experimentální hematologie 1. LF UK, Praha
- 6 **Pembrolizumab v léčbě pokročilého maligního melanomu**
MUDr. Radek Lakomý, Ph.D. | MUDr. Alexandr Poprach, Ph.D. | MUDr. Renata Koukalová
Klinika komplexní onkologické péče, MOÚ a LF MU, Brno
- 6 **Necytostatická kombinace kyseliny all-trans-retinové a oxidu arsenitého v terapii nově diagnostikované akutní promyelocytární leukemie**
MUDr. Zdeněk Kořístek, Ph.D. | MUDr. Petra Richterová Klinika hematookologie, FN Ostrava
- 6 **Ibrutinib jako přemostění k alogenní transplantaci kostní dřeně**
doc. MUDr. Pavel Klener jr., Ph.D. I. interní klinika – hematologie VFN a 1. LF UK, Praha
- 7 **Ibrutinib v léčbě opakovaně relabující nemocné s chronickou lymfocytární leukemií / lymfomem z malých lymfocytů s nepříznivými genetickými změnami a postižením skeletu**
MUDr. Pavlína Ryznerová Hemato-onkologická klinika FN a LF UP, Olomouc
MUDr. Lenka Henzlová Klinika nukleární medicíny FN a LF UP, Olomouc
prof. MUDr. Tomáš Papajík, CSc. Hemato-onkologická klinika FN a LF UP, Olomouc
- 7 **Úspěšná léčba ibrutinibem u pacientky s chronickou lymfocytární leukemií a nutností antiagregační terapie**
MUDr. Jakub Trizuljak | prof. MUDr. Michael Doubek, Ph.D.
Interní hematologická a onkologická klinika LF MU, CEITEC MU a FN, Brno
- 7 **Subkutánní imunoglobuliny v dětském věku a v domácím prostředí**
Veronika Čepeláková | MUDr. Petra Keslová | Blanka Nagyová | MUDr. Petr Smíšek |
MUDr. Martina Suková Klinika dětské hematologie a onkologie FN v Motole, Praha

První a druhá linie léčby metastatického HER2 pozitivního karcinomu prsu

doc. MUDr. Petra Tesařová, CSc. Onkologická klinika 1. LF UK a VFN, Praha

- 1 Tevaarwerk, A. J. – Gray, R. J. – Schneider, B. P., et al.: Survival in patients with metastatic recurrent breast cancer after adjuvant chemotherapy: little evidence of improvement over the past 30 years. *Cancer*, 2013, 119, s. 1140.
- 2 Dawood, S. – Broglio, K. – Buzdar, A. U., et al.: Prognosis of women with metastatic breast cancer by HER2 status and trastuzumab treatment: an institutional-based review. *J Clin Oncol*, 2010, 28, s. 92.
- 3 Balduzzi, S. – Mantarro, S. – Guarneri, V., et al.: Trastuzumab-containing regimens for metastatic breast cancer. *Cochrane Database Syst Rev*, 2014, CD006242.
- 4 Slamon, D. J. – Leyland-Jones, B. – Shak, S., et al.: Use of chemotherapy plus a monoclonal antibody against HER2 for metastatic breast cancer that overexpresses HER2. *N Engl J Med*, 2001, 344, s. 783.
- 5 Blackwell, K. L. – Burstein, H. J. – Storniolo, A. M., et al.: Overall survival benefit with lapatinib in combination with trastuzumab for patients with human epidermal growth factor receptor 2-positive metastatic breast cancer: final results from the EGF104900 Study. *J Clin Oncol*, 2012, 30, s. 2585.
- 6 Baselga, J. – Cortés, J. – Kim, S. B., et al.: Pertuzumab plus trastuzumab plus docetaxel for metastatic breast cancer. *N Engl J Med*, 2012, 366, s. 109.
- 7 Swain, S. M. – Baselga, J. – Kim, S. B., et al.: Pertuzumab, trastuzumab, and docetaxel in HER2-positive metastatic breast cancer. *N Engl J Med*, 2015, 372, s. 724.
- 8 Baselga, J. – Gelmon, K. A. – Verma, S., et al.: Phase II trial of pertuzumab and trastuzumab in patients with human epidermal growth factor receptor 2-positive metastatic breast cancer that progressed during prior trastuzumab therapy. *J Clin Oncol*, 2010, 28, s. 1138.
- 9 Verma, S. – Miles, D. – Gianni, L., et al.: Trastuzumab emtansine for HER2-positive advanced breast cancer. *N Engl J Med*, 2012, 367, s. 1783.
- 10 Wildiers, H. – Kim, S. B. – Gonzalez-Martin, A., et al.: Trastuzumab emtansine improves overall survival versus treatment of physician's choice in patients with previously treated HER2-positive metastatic breast cancer: Final overall survival results from the phase 3 TH3RESA study. 2015 San Antonio Breast Cancer Symposium, 8–12. 12. 2015.
- 11 von Minckwitz, G. – du Bois, A. – Schmidt, M., et al.: Trastuzumab beyond progression in human epidermal growth factor receptor 2-positive advanced breast cancer: a german breast group 26/breast international group 03-05 study. *J Clin Oncol*, 2009, 27, s. 1999.
- 12 Dawood, S. – Broglio, K. – Buzdar, A. U., et al.: Prognosis of women with metastatic breast cancer by HER2 status and trastuzumab treatment: an institutional-based review. *J Clin Oncol*, 2010, 28, s. 92.
- 13 Krop, I. E. – Kim, S. B. – González-Martín, A., et al.: Trastuzumab emtansine versus treatment of physician's choice for pretreated HER2-positive advanced breast cancer (TH3RESA): a randomised, open-label, phase 3 trial. *Lancet Oncol*, 2014, 15, s. 689.
- 14 Ramakrishna, N. – Temin, S. – Chandralapaty, S., et al.: Recommendations on disease management for patients with advanced human epidermal growth factor receptor 2-positive breast cancer and brain metastases: American Society of Clinical Oncology clinical practice guideline. *J Clin Oncol*, 2014, 32, s. 2100.
- 15 Swain, S. M. – Baselga, J. – Kim, S. B., et al.: Pertuzumab, trastuzumab, and docetaxel in HER2-positive metastatic breast cancer. *N Engl J Med*, 2015, 372, s. 724–734.
- 16 Verma, S. – Miles, D. – Gianni, L., et al.: Trastuzumab emtansine for HER2-positive advanced breast cancer. *N Engl J Med*, 2012, 367, s. 1783–1791.
- 17 Krop, I. E. – Lin, N. U. – Blackwell, K., et al.: Trastuzumab emtansine (T-DM1) versus lapatinib plus capecitabine in patients with HER2-positive metastatic breast cancer and central nervous system metastases: a retrospective, exploratory analysis in EMILIA. *Ann Oncol*, 2015, 26, s. 113–119.

Pacientka s generalizovaným hormonálně dependentním tumorem prsu s hormonální rezistencí na terapii Afnitorem

MUDr. Iva Priester | MUDr. Peter Priester Klinika onkologie a radioterapie FN Hradec Králové

- 1 Beaver, A. J. – Park, B. H.: The Bolero-2 trial: the addition of everolimus to exemestane in the treatment of postmenopausal hormone receptor-positive advanced breast cancer. *Future Oncol*, 2012, 8, s. 651–657.
- 2 Baselga, J. – Campone, M. – Piccart, M., et al.: Everolimus in postmenopausal hormone-receptor-positive advanced breast cancer. *New Eng J Med*, 2012, 366, s. 520–529.

Bevacizumab v kombinaci s chemoterapií u pacientky s recidivou karcinomu ovaria rezistentního vůči platině

MUDr. Markéta Bednaříková Interní hematologická a onkologická klinika LF MU a FN Brno

MUDr. Vít Weinberger, Ph.D. Gynekologicko-porodnická klinika LF MU a FN Brno

MUDr. Renata Koukalová Oddělení nukleární medicíny MOÚ, Brno

- 1 Bast, R. C. – Hennessy, B. – Mills, G. B.: The biology of ovarian cancer: new opportunities for translation. *Nature reviews. Cancer*, 2009, 9, s. 415, dostupné z: doi:10.1038/nrc2644, vyhledáno 2. 4. 2017.
- 2 Pujade-Lauraine, E. – Hilpert, F. – Weber, B., et al.: Bevacizumab combined with chemotherapy for platinum-resistant recurrent ovarian cancer: The AURELIA open-label randomized phase III trial. *J Clin Oncol*, 2014, 32, s. 1302–1308, dostupné z: doi:10.1200/JCO.2013.51.4489, vyhledáno 1. 1. 2017.
- 3 Monk, B. J. – Pujade-Lauraine, E. – Burger, R. A.: Integrating bevacizumab into the management of epithelial ovarian cancer: the controversy of front-line versus recurrent disease. *An Oncol*, 2013, 24, suppl. 10, s. 53–58, dostupné z: doi:10.1093/annonc/mdt472, vyhledáno 2. 4. 2017.
- 4 Perren, T. J. – Swart, A. M. – Pfisterer, J., et al.: A phase 3 trial of bevacizumab in ovarian cancer. *New Eng J Med*, 2011, 365, s. 2484–2496, dostupné z: doi:10.1056/NEJMoa1103799, vyhledáno 2. 4. 2017.
- 5 Burger, R. A. – Brady, M. F. – Bookman, M. A., et al.: Incorporation of bevacizumab in the primary treatment of ovarian cancer. *New Eng J Med*, 2011, 365, s. 2473–2483, dostupné z: doi:10.1056/NEJMoa1104390, vyhledáno 2. 4. 2017.
- 6 Aghajanian, C. – Blank, S. V. – Goff, B. A., et al.: A randomized, double-blind, placebo-controlled phase III trial of chemotherapy with or without bevacizumab in patients with platinum-sensitive recurrent epithelial ovarian, primary peritoneal, or fallopian tube cancer. *J Clin Oncol*, 2012, 30, s. 2039–2045, dostupné z: doi:10.1200/JCO.2012.42.0505, vyhledáno 1. 1. 2017.

Léčba nemalobuněčného karcinomu plic Xalkori

MUDr. Leona Koubková Pneumologická klinika 2. LF UK a FN Motol, Praha

- 1 Kwak, E. L. – Bang, Y. – Camidge, D. R., et al.: Anaplastic lymphoma kinase inhibition in non-small-cell lung cancer. *N Engl J Med*, 2010, 363, s. 1693–1703.
- 2 Camidge, D. R. – Bang, Y. J. – Kwak, E. L., et al.: Activity and safety of crizotinib in patients with ALK-positive non-small-cell lung cancer: updated results from a phase 1 study. *Lancet Oncol*, 2012, 13, s. 1011–1019.
- 3 Shaw, A. T. – Kim, D. W. – Nakagawa, K., et al., on behalf of all PROFILE 1007 investigators: Phase III study of crizotinib vs pemetrexed or docetaxel chemotherapy in patients with advanced ALK-positive NSCLC. Prezentováno na 37. kongresu ESMO, Vídeň, Rakousko, 2012, abstrakt LBA1 PR.
- 4 Mok, T. – Kim, D. W. – Solomon, B. J., et al.: First-line crizotinib versus pemetrexed–cisplatin or pemetrexed–carboplatin in patients (pts) with advanced ALK positive non-squamous non-small cell lung cancer (NSCLC): results of a phase III study (PROFILE 1014). *J Clin Oncol*, 2014, 32, suppl. 1, abstrakt 8002.
- 5 Shaw, A. T., et al.: Ceritinib in ALK-rearranged non-small-cell lung cancer. *N Engl J Med*, 2014, 370, s. 1189–1197.
- 6 Dong-Wan, K., et al.: Ceritinib in advanced anaplastic lymphoma kinase (ALK)-rearranged (ALK+) non-small cell lung cancer (NSCLC): Results of the ASCEND-1 trial. *J Clin Oncol*, 2014, 32, suppl., abstrakt 8003.
- 7 Shaw, A. T. – Tan, D. S. W. – Crinò, L., et al.: Two phase III

studies evaluating ceritinib in patients with anaplastic lymphoma kinase (ALK)-rearranged (ALK+) non-small cell lung cancer (NSCLC): ASCEND-4 and ASCEND-5. *Ann Oncol*, 2014, 25, suppl. 4, iv469.

8 Scagliotti, G. – Kim, T. M. – Crinò, L., et al.: Ceritinib vs chemotherapy (CT) in patients (pts) with advanced anaplastic lymphoma kinase (ALK)-rearranged (ALK+) non-small cell lung cancer (NSCLC) previously treated with CT and crizotinib (CRZ): results from the confirmatory phase 3 ASCEND-5 study. ESMO 2016, abstrakt LBA42_PR.

9 Song, Z. – Wang, M. – Zhang, A.: Alectinib: a novel second generation anaplastic lymphoma kinase(ALK)inhibitor for overcoming clinically-acquired resistance [J]. *Acta Pharmaceutica Sinica B*, 2015, 5, s. 34–37.

10 Ajimizu, H. – Kim, Y. H. – Mishima, M.: Rapid response of brain metastases to alectinib in a patient with non-small-cell lung cancer

resistant to crizotinib. *Med Oncol*, 2015, 32, s. 477.

11 Gainer, J. F. – Sherman, C. A. – Willoughby, K., et al.: Alectinib salvages CNS relapses in ALK-positive lung cancer patients previously treated with crizotinib and ceritinib. *J Thorac Oncol*, 2015, 10, s. 232–236.

12 Iacono, D. – Chiari, R. – Metro, G., et al.: Future options for ALK-positive non-small cell lung cancer. *Lung Cancer*, 2015, pii: S0169-5002(14)00527-3.

13 Barlesi, F., et al.: NP28673 presented at ESMO 2016. *An Oncol*, 2016, 27, suppl. 6, 1263P.

14 Camidge, R., et al.: NP28761 published WCLC 2016. *J Thor Oncol*, 2016, 12, s. S378.

15 Kris, M. G. – Johnson, B. E. – Kwiatkowski, D. J., et al.: Identification

of driver mutations in tumor specimens from 1,000 patients with lung adenocarcinoma: The NCI's Lung Cancer Mutation Consortium (LCMC). 2011 ASCO Annual Meeting. *J Clin Oncol*, 2011, 29, suppl., abstrakt CRA7506.

16 Solomon, B. J., et al.: *J Clin Oncol*, 2013, 31, suppl., abstrakt 8105 + Yamamoto, et al.: JSMO 2013, abstrakt o1-133. In: ALK como Diana Terapéutica, Dr. Santiago Ponce Aix, Oncología Médica – Unidad Tumores Torácicos, Hospital Universitario 12 de Octubre.

17 Solomon, B. J. – Mok, T. – Kim, D.-W., et al.: First-line crizotinib versus chemotherapy in ALK-positive lung cancer. *N Engl J Med*, 2014, 371, s. 2167–2177.

Umírají naši pacienti na podvýživu?

MUDr. Štěpán Tuček, Ph.D.

Klinika komplexní onkologické péče, Masarykův onkologický ústav a LF MU, Brno

1 Arends, J. – Bachmann, P. – Baracos, V., et al.: ESPEN guidelines on nutrition in cancer patients. *Clin Nutr*, 2017, 36, s. 11–48, doi: 10.1016/j.clnu.2016.07.015.

2 Ševela, S. – Novák, F. – Kazda, A., et al.: Realimentační syndrom. *Čas*

Lék Čes, 2016, 155, s. 88–94.

Pacientka s NSCLC léčeným ve druhé linii pembrolizumabem

MUDr. Leona Koubková Pneumologická klinika 2. LF UK a FN Motol, Praha

1 Drake, C. G. – Lipson, E. J. – Brahmer, J. R.: Breathing new life into immunotherapy: Review of melanoma, lung and kidney cancer. *Nature Reviews Clinical Oncology*, 2014, 11, s. 1 24–37.

2 Villaruz, L. C. – Kalyan, A. – Zourou, H., et al.: Immunotherapy in lung cancer. *Transl Lung Cancer Res*, 2014, 3, s. 2–14.

3 Edward, B. – Garon, M. D. – Naiyer A., et al.: Pembrolizumab for the treatment of non-small-cell lung cancer. *N Engl J Med*, 2015, 372, s. 2018–2028.

4 Herbst, R. S. – Bass, P. – Kim, D.W., et al.: Pembrolizumab versus docetaxel for previously treated, PD-L1-positive, advanced

non-small-cell lung cancer (KEYNOTE-010): a randomised controlled trial. *Lancet*, 2016, 387, s. 1540–1550.

5 Hui, R. – Gandhi, L. – Costa, E. C., et al.: Long-term OS for patients with advanced NSCLC enrolled in the KEYNOTE-001 study of pembrolizumab (pembro). *J Clin Oncol*, 2016, 34, suppl., abstrakt 9026.

Alternativní dávkování sunitinibu v režimu 2 + 1

doc. MUDr. Tomáš Büchler, Ph.D. Onkologická klinika 1. LF UK a Thomayerovy nemocnice, Praha

1 Dušek, L. – Mužík, J. – Kubásek, M., et al.: Epidemiologie zhoubných nádorů v České republice [online]. Masarykova univerzita, 2005, dostupné z: <http://www.svod.cz>. Verze 7.0 [2007], vyhledáno 28. 3. 2017.

2 Faivre, S. – Demetri, G. – Sargent, W., et al.: Molecular basis for sunitinib efficacy and future clinical development. *Nat Rev Drug Discov*, 2007, 6, s. 734–745.

3 Motzer, R. J. – Hutson, T. E. – Tomczak, P., et al.: Sunitinib versus interferon alfa in metastatic renal-cell carcinoma. *N Engl J Med*, 2007, 356, s. 115–124.

4 Motzer, R. J. – Hutson, T. E. – Cella, D., et al.: Pazopanib versus sunitinib in metastatic renal-cell carcinoma. *N Engl J Med*, 2013, 369, s. 722–731.

5 Najjar, Y. G. – Mittal, K. – Elson, P., et al.: A 2 weeks on and 1 week off schedule of sunitinib is associated with decreased toxicity in metastatic renal cell carcinoma. *Eur J Cancer*, 2014, 50, s. 1084–1089.

6 Atkinson, B. J. – Kalra, S. – Wang, X., et al.: Clinical outcomes for patients with metastatic renal cell carcinoma treated with alternative sunitinib schedules. *J Urol*, 2014, 191, s. 611–618.

7 Bjarnason, G. A. – Khalil, B. – Hudson, J. M., et al.: Outcomes in patients with metastatic renal cell cancer treated with individualized sunitinib therapy: correlation with dynamic microbubble ultrasound data and review of the literature. *Urol Oncol*, 2014, 32, s. 480–487.

8 Kondo, T. – Takagi, T. – Kobayashi, H., et al.: Superior tolerability of altered dosing schedule of sunitinib with 2-weeks-on and 1-week-off

in patients with metastatic renal cell carcinoma—comparison to standard dosing schedule of 4-weeks-on and 2-weeks-off. *Jpn J Clin Oncol*, 2014, 44, s. 270–277.

9 Lee, J. L. – Kim, M. K. – Park, I., et al.: Randomized phase II trial of sunitinib four weeks on and two weeks off versus two weeks on and one week off in metastatic clear-cell type renal cell carcinoma: RES-TORE trial. *Ann Oncol*, 2015, 26, s. 2300–2305.

10 Poprach, A. – Bortlíček, Z. – Melichar, B., et al.: Efficacy of sunitinib in patients with metastatic or unresectable renal cell carcinoma and renal insufficiency. *Eur J Cancer*, 2015, 51, s. 507–513.

Tapentadol v léčbě polymorbidních nemocných s nádory plic

doc. MUDr. Luboš Holubec, Ph.D., MBA Oddělení klinické onkologie Nemocnice Na Homolce, Praha Ing. et Ing. Jiří Polívka, Ph.D. Biomedicínské centrum LF UK v Plzni
MUDr. Martin Šafanda Oddělení klinické onkologie Nemocnice Na Homolce, Praha

1 Balducci, L. – Dolan, D.: Palliative care of cancer in the older patient. *Curr Oncol Rep*, 2016, 18, s. 70.

2 Nurwidya, F. – Syahrudin, E. – Yunus, F.: Pain management in lung cancer. *Adv Respir Med*, 2016, 84, s. 331–336.

3 Davis, M. P. – Mehta, Z.: Opioids and chronic pain: where is the balance? *Curr Oncol Rep*, 2016, 18, s. 71.

4 Rokyta, R. – Kozák, J. – Lejčko, J., et al.: Metodické pokyny pro farmakoterapii bolesti. *Bolest*, 2016, 19, s. 1–28.

5 Bialous, S. A. – Sarna, L.: Lung cancer and tobacco: what is new? *Nurs Clin North Am*, 2017, 52, s. 53–63.

6 Cooley, M. E. – Wang, Q. – Johnson, B. E., et al.: Factors associated with smoking abstinence among smokers and recent-quitters with lung and head and neck cancer. *Lung Cancer*, 2012, 76, s. 144–149.

7 Cardinale, A. – Nastrucci, C. – Cesario, A., et al.: Nicotine: specific role in angiogenesis, proliferation and apoptosis. *Crit Rev Toxicol*, 2012, 42, s. 68–89.

8 Karagueuzian, H. S. – White, C. – Satyre, J., et al.: Cigarette smoke radioactivity and lung cancer risk. *Nicotine Tob Res*, 2012, 14, s. 79–90.

9 Muscat, J. E. – Ahn, K. – Richie, J. P. Jr., et al.: Nicotine dependence phenotype and lung cancer risk. *Cancer*, 2011, 117, s. 5370–5376.

10 Flores, C. M.: The promise and pitfalls of a nicotinic cholinergic approach to pain management. *Pain*, 2000, 88, s. 1–6.

11 Ditre, J. W. – Kosiba, J. D. – Zale, E. L., et al.: Chronic pain status, nicotine withdrawal, and expectancies for smoking cessation among lighter smokers. *Ann Behav Med*, 2016, 50, s. 427–435.

12 Gonzalez, A. – Japuntich, S. – Keating, N. L., et al.: Pain experiences

among a population-based cohort of current, former, and never regular smokers with lung and colorectal cancer. *Cancer*, 2014, 120, s. 3554–3561.

13 Peptone, L. J. – Mustian, K. M. – Morrow, G. R., et al.: The effect of cigarette smoking on cancer treatment-related side effects. *Oncologist*, 2011, 16, s. 1784–1792.

14 Ditre, J. W. – Gonzalez, B. D. – Simmons, V. N., et al.: Associations between pain and current smoking status among cancer patients. *Pain*, 2011, 152, s. 60–65.

15 Mercadante, S. – Porzio, G. – Gebbia, V.: New opioids. *J Clin Oncol*, 2014, 32, s. 1671–1676.

16 Al-Attiyyat, N. – Obaid, A.: Management of peripheral neuropathy induced by chemotherapy in adults with cancer: a review. *Int J Palliat*

- Nurs, 2017, 23, s. 13–17.
- 17 **Barter, G. – Morgan, C. L. – Jenkins-Jones, S., et al.:** Association of adverse events and health service usage with tapentadol prolonged-release treatment compared with morphine controlled-release (Cr) and oxycodone Cr: a UK primary care observational study. *Value Health*, 2015, 18, s. A658.
 - 18 **Baron, R. – Likar, R. – Martin-Mola, E., et al.:** Effectiveness of tapentadol prolonged release (PR) compared with oxycodone/naloxone PR for the management of severe chronic low back pain with a neuropathic component: a randomized, controlled, open-label, phase 3b/4 study. *Pain Pract*, 2016, 16, s. 580–599.
 - 19 **Gonçalves, L. – Friend, L. V. – Dickenson, A. H.:** The influence of μ -opioid and noradrenaline reuptake inhibition in the modulation of pain responsive neurones in the central amygdala by tapentadol in rats with neuropathy. *Eur J Pharmacol*, 2015, 749, s. 151–160.
 - 20 **Biondi, D. M. – Diany, J. – Etropolis, M., et al.:** Tolerability and efficacy of tapentadol extended release in elderly patients \geq 75 years of age with chronic osteoarthritis knee or low back pain. *J Opioid Manag*, 2015, 11, s. 393–403.
 - 21 **Wiffen, P. J. – Derry, S. – Naessens, K., et al.:** Oral tapentadol for cancer pain. *Cochrane Database Syst Rev*, 2015, 25, CD011460.
 - 22 **Veal, F. C. – Peterson, G. M.:** Pain in the frail or elderly patient: does tapentadol have a role? *Drugs Aging*, 2015, 32, s. 419–426.
 - 23 **Galicía-Castillo, M.:** Opioids for persistent pain in older adults. *Cleve Clin J Med*, 2016, 83, s. 443–451.
 - 24 **Carmona-Bayonas, A. – Jiménez-Fonseca, P. – Castañón, E., et al.:** Chronic opioid therapy in long-term cancer survivors. *Clin Transl Oncol*, 2017, 19, s. 236–250.
 - 25 **Galicía-Castillo, M.:** Opioids for persistent pain in older adults. *Cleve Clin J Med*, 2016, 83, s. 443–451.
 - 26 **Sande, T. A. – Laure, B. J. – Falkon, M. T.:** The use of opioids in cancer patients with renal impairment—a systematic review. *Support Care Cancer*, 2017, 25, s. 661–675.
 - 27 **Dai, D. P. – Li, C. B. – Wang, S. H., et al.:** Identification and characterization of a novel CYP2C9 allelic variant in a warfarin-sensitive patient. *Pharmacogenomics*, 2015, 16, s. 1475–1486.
 - 28 **Luo, S. B. – Li, C. B. – Dai, D. P., et al.:** Characterization of a novel CYP2C9 mutation (1009C>A) detected in a warfarin-sensitive patient. *J Pharmacol Sci*, 2014, 125, s. 150–156.
 - 29 **Caldeira, D. – Costa, J. – Barra, M., et al.:** How safe is acetaminophen use in patients treated with vitamin K antagonists? A systematic review and meta-analysis. *Thromb Res*, 2015, 135, s. 58–61.
 - 30 **Pinson, G. M. – Beall, J. W. – Kyle, J. A.:** A review of warfarin dosing with concurrent acetaminophen therapy. *J Pharm Pract*, 2013, 26, s. 518–521.
 - 31 **Patrono, C.:** Cardiovascular effects of nonsteroidal anti-inflammatory drugs. *Curr Cardiol Rep*, 2016, 18, s. 25.
 - 32 **Ungprasert, P.:** NSAIDs and cardiovascular disease: time to say no to diclofenac. *Intern Emerg Med*, 2016, 11, s. 1–2.
 - 33 **Odum, D. M. – Mladsi, D. M. – Saag, K. G., et al.:** Relationship between diclofenac dose and risk of gastrointestinal and cardiovascular events: meta-regression based on two systematic literature reviews. *Clin Ther*, 2014, 36, s. 906–917.
 - 34 **Mitra, S. – Chan, A. K. – Paes, B. A.:** Thrombosis and hemostasis in newborns (THIN) group. The association of platelets with failed patent ductus arteriosus closure after a primary course of indomethacin or ibuprofen: a systematic review and meta-analysis. *J Matern Fetal Neonatal Med*, 2017, 30, s. 127–133.
 - 35 **Wang, D. – Wang, M. – Cheby, Y., et al.:** Cardiovascular hazard and non-steroidal anti-inflammatory drugs. *Curr Opin Pharmacol*, 2005, 5, s. 204–210.
 - 36 **Dannoura, A. – Giraldo, A. – Pereira, I., et al.:** Ibuprofen inhibits migration and proliferation of human coronary artery smooth muscle cells by inducing a differentiated phenotype: role of peroxisome proliferator-activated receptor γ . *J Pharm Pharmacol*, 2014, 66, s. 779–792.
 - 37 **Cherubino, P. – Sarzi-Puttini, P. – Zuccaro, S. M., et al.:** The management of chronic pain in important patient subgroups. *Clin Drug Investig*, 2012, 32, s. 35–44.
 - 38 **Winstock, A. R. – Borschmann, R. – Bell, J.:** The non-medical use of tramadol in the UK: findings from a large community sample. *Int J Clin Pract*, 2014, 68, s. 1147–1151.
 - 39 **El-Hadidy, M. A. – Helaly, A. M.:** Medical and psychiatric effects of long-term dependence on high dose of tramadol. *Subst Use Misuse*, 2015, 50, s. 582–589.
 - 40 **Rajabizadeh, G. – Kheradmand, A. – Nasirian, M.:** Psychosis following tramadol withdrawal. *Addict Health*, 2009, 1, s. 58–61.
 - 41 **Tabatabaee, A. – Tafreshi, M. Z. – Rassouli, M., et al.:** Effect of therapeutic touch in patients with cancer: a literature review. *Med Arch*, 2016, 70, s. 142–147.

Zkušenosti s léčbou nemocného s lokálně pokročilým bazaliomem preparátem Erivedge

MUDr. Martina Zimovjanová, Ph.D. Onkologická klinika VFN a 1. LF UK, Praha

- 1 **Von Hoff, D. D. – LoRusso, P. M. – Rudin, C. M., et al.:** Inhibition of the hedgehog pathway in advanced basal-cell carcinoma. *N Engl J Med*, 2009, 361, s. 1164–1171.
- 2 **Jacobsen, A. A. – Aldahan, A. S. – Hughes, O. B., et al.:** Hedgehog pathway inhibitor therapy for locally advanced and metastatic basal cell carcinoma: A systematic review and pooled analysis of interventional studies. *JAMA Dermatol*, 2016, 152, s. 816–824.
- 3 **Sekulic, A. – Migden, M. R. – Baset, S. N.:** Long-term safety and efficacy vismodegib in patients with advanced basal cell carcinoma: final update (30-month) of the pivotal ERIVANCE BCC study. *Proc Am Soc Clin Oncol*, 2014, 32, suppl., 5s, abstrakt 9013.
- 4 **Hasson, J. – Hauschild, A. – Kunstfeld, R.:** Vismodegib (VISMO), a Hedgehog pathway inhibitor (HPI), in advanced basal cell carcinoma (aBCC): STEVE study primary analysis in 1215 patients (pts). *Proc Am Soc Clin Oncol*, 2016, 34, suppl., abstrakt 9532.
- 5 **Dreno, B. – Kunstfeld, R. – Hauschild, A., et al.:** Two intermittent vismodegib dosing regimens in patients with multiple basal-cell carcinomas (MIKIE): a randomised, regimen-controlled, double blind, phase 2 trial. *Lancet Oncol*, 2017, 18, s. 404–412, doi: 10.1016/S1470-2045(17)30072-4.

Pacient s typickým obrazem myelodysplastického syndromu s neobvyklým průběhem navozeným použitím nejnovějších možností terapie

MUDr. Anna Jonášová, Ph.D. I. interní klinika – klinika hematologie, 1. LF UK a VFN, Praha

- 1 **Silverman, L. R. – Fenaux, P. – Mufti, G. J., et al.:** Continue azacitidine therapy beyond time of first response improves quality of response in patients with higher-risk myelodysplastic syndromes. *Cancer*, 2011, 117, s. 2697–2702.
- 2 **Greenberg, P. – Cox, C. – LeBeau, M. M., et al.:** International scoring system for evaluating prognosis in myelodysplastic syndromes. *Blood*, 1997, 89, s. 2079–2088 (erratum: *Blood*, 1998, 91, s. 1100).
- 3 **Greenberg, P. L. – Tuechler, H. – Schanz, J., et al.:** Revised international prognostic scoring system for myelodysplastic syndromes. *Blood*, 2012, 120, s. 2454–2465.
- 4 **Ebert, B. L. – Pretz, J. – Golub, T. R., et al.:** Identification of RPS14 as a 5q- syndrome gene by RNA interference screen. *Nature*, 2008, 451, s. 335–339.
- 5 **Van den Berghe, H., et al.:** Distinct hematological disorder with deletion of long arm of no. 5 chromosome. *Nature*, 1974, 251, s. 437–438.
- 6 **Haase, D. – Germing, U. – Schanz, J., et al.:** New insights into the prognostic impact of the karyotype in MDS and correlation with subtypes: evidence from a core dataset of 2124 patients. *Blood*, 2007, 110, s. 4385–4395.
- 7 **List, A. – Dewald, G. – Bennett, J., et al.:** Myelodysplastic Syndrome-003 Study Investigators: Lenalidomide in the myelodysplastic syndrome with chromosome 5q deletion. *N Engl J Med*, 2006, 355, s. 1456–1465.
- 8 **Jonášová, A., et al.:** Lenalidomid v terapii MDS nemocných s 5q- abe-rací, zkušenosti české MDS skupiny. *Vnitř Lek*, 2015, 61, s. 1028–1033.
- 9 **Jonášová, A. – Fuchs, O., et al.:** High level of full-length cereblon mRNA in low risk myelodysplastic syndrome with isolated 5q deletion is implicated in the efficacy of lenalidomide. *European J Haematol*, 2015, 95, s. 27–34.
- 10 **Fenaux, P. – Mufti, G. J. – Hellstrom-Lindberg, E., et al.:** International Vidaza High-Risk MDS Survival Study Group: Efficacy of azacitidine compared with that of conventional care regimens in the treatment of higher-risk myelodysplastic syndromes: a randomised, open-label, phase III study. *Lancet Oncol*, 2009, 10, s. 223–232.
- 11 **Jonášová, A. – Cermák, J. – Cerveňek, L., et al.:** První zkušenosti České MDS skupiny s terapií 5-azacytidinem u nemocných s myelodysplastickým syndromem s vyšším rizikem (IPSS střední 2 a vysoké riziko), akutní myeloidní leukemii do 30 % myeloblastů a chronickou myelomonocytární leukemii II. *Tranfuse hematologie dnes*, 2013, 19, s. 125–133.
- 12 **Daniel, A. – Orazi, A. A. – Vardiman, J. W., et al.:** The 2016 revision to the World Health Organization classification of myeloid neoplasms and acute leukemia. *Blood*, 2016, 127, s. 2391–2405.

Nivolumab v léčbě nemocných s relabujícím nebo refrakterním Hodgkinovým lymfomem před a po alogenní transplantaci krvetvorných buněk

MUDr. Jozef Michalka | MUDr. Zdeněk Král, CSc. | doc. MUDr. Andrea Janíková, Ph.D.

Interní hematologická a onkologická klinika FN Brno a LF MU, Brno

- 1 Swerdlow, S. H. – Campo, E. – Hartus, N. L., et al.: *WHO Classification of Tumours of Hematopoietic and Lymphoid Tissues*. Lyon, Francie, IARC Press, 2008.
- 2 Küppers, R. – Rajewsky, K.: The origin of Hodgkin and Reed/Sternberg cells in Hodgkin's disease. *Annu Rev Immunol*, 1998, 16, s. 471–493.
- 3 Roemer, M. G. M. – Advani, R. H. – Ligon, A. H., et al.: PD-L1 and PD-L2 genetic alterations define classical Hodgkin lymphoma and predict outcome. *J Clin Oncol*, 2016, publikováno online 11. 4. 2016, DOI:10.1200/JCO.2016.66.4482.
- 4 Freeman, G. J. – Long, A. J. – Iwai, Y., et al.: Engagement of the PD-1 immunoinhibitory receptor by a novel B7 family member leads to negative regulation of lymphocyte activation. *J Exp Med*, 2000, 192, s. 1027–1034.
- 5 Yamamoto, R. – Nishikori, M. – Kitawaki, T., et al.: PD-1–PD-1 ligand interaction contributes to immunosuppressive microenvironment of Hodgkin lymphoma. *Blood*, 2008, 111, s. 3220–3224.
- 6 Schmitz, N. – Pfistner, B. – Sextro, M., et al.: Aggressive conventional chemotherapy compared with high-dose chemotherapy with autologous haemopoietic stem-cell transplantation for relapsed chemosensitive Hodgkin's disease: a randomised trial. *Lancet*, 2002, 359, s. 2065–2071.
- 7 Arai, S. – Fanale, M. – DeVos, S., et al.: Defining a Hodgkin lymphoma population for novel therapeutics after relapse from autologous hematopoietic cell transplant. *Leuk Lymphoma*, 2013, 54, s. 2531–2533.
- 8 Moskowitz, C. H. – Nademanee, A. – Masszi, T., et al.: Brentuximab vedotin as consolidation therapy after autologous stem-cell transplantation in patients with Hodgkin's lymphoma at risk of relapse or progression (AETHERA): a randomised, double-blind, placebo-controlled, phase 3 trial. *Lancet* (London, England), 2015, 385, s. 1853–1862.
- 9 Chen, R. – Gopal, A. K. – Smith, S. E., et al.: Five-year survival and durability results of brentuximab vedotin in patients with relapsed or refractory Hodgkin lymphoma. Publikováno online 18. 7. 2016, doi:10.1182/blood-2016-02-699850.
- 10 Chen, R. – Palmer, J. M. – Popplewell, L., et al.: Reduced intensity allogeneic hematopoietic cell transplantation can induce durable remission in heavily pretreated relapsed Hodgkin lymphoma. *Ann Hematol*, 2011, 90, s. 803–808.
- 11 Sureda, A. – Robinson, S. – Canals, C., et al.: Reduced-intensity conditioning compared with conventional allogeneic stem-cell transplantation in relapsed or refractory Hodgkin's lymphoma: an analysis from the Lymphoma Working Party of the European Group for Blood and Marrow Transplantation. *J Clin Oncol*, 2008, 26, s. 455–462.
- 12 Armand, P.: Immune checkpoint blockade in hematologic malignancies. *Blood*, 2015, 125, s. 3393–3400.
- 13 Ansell, S. M. – Lesokhin, A. M. – Borrello, I., et al.: PD-1 blockade with nivolumab in relapsed or refractory Hodgkin's lymphoma. *N Engl J Med*, 2015, 372, s. 311–319.
- 14 Blazar, B. R. – Carreno, B. M. – Panoskaltis-Mortari, A., et al.: Blockade of programmed death-1 engagement accelerates graft-versus-host disease lethality by an IFN-gamma-dependent mechanism. *J Immunol*, 2003, 171, s. 1272–1277.
- 15 Saha, A. – Aoyama, K. – Taylor, P. A., et al.: Host programmed death ligand 1 is dominant over programmed death ligand 2 expression in regulating graft-versus-host disease lethality. *Blood*, 2013, 122, s. 3062–3073.
- 16 Herbaux, C. – Gauthier, J. – Brice, P., et al.: Efficacy and tolerability of nivolumab after allogeneic transplantation for relapsed Hodgkin's lymphoma. Publikováno online 7. 3. 2017, doi:10.1182/blood-2016-11-749556.
- 17 Merryman, R. W. – Kim, H. T. – Zinzani, P. L., et al.: Safety and efficacy of allogeneic hematopoietic stem cell transplant after PD-1 blockade in relapsed/refractory lymphoma. Publikováno online 10. 1. 2017, doi:10.1182/blood-2016-09-738385.
- 18 Santoro, A., et al.: Ifosfamide, gemcitabine, and vinorelbine: a new induction regimen for refractory and relapsed Hodgkin's lymphoma. *Haematologica*, 2007, 92, s. 35–41.
- 19 Slavin, S. – Nagler, A. – Naparstek, E., et al.: Nonmyeloablative stem cell transplantation and cell therapy as an alternative to conventional bone marrow transplantation with lethal cytoreduction for the treatment of malignant and nonmalignant hematologic diseases. *Blood*, 1998, 91, s. 756–763.
- 20 Younes, A. – Gopal, A. K. – Smith, S. E., et al.: Results of a pivotal phase II study of brentuximab vedotin for patients with relapsed or refractory Hodgkin's lymphoma. *J Clin Oncol*, 2012, 30, s. 2183–2189.
- 21 Moskowitz, A. J. – Hamlin, P. A. Jr. – Perales, M. A., et al.: Phase II study of bendamustine in relapsed and refractory Hodgkin lymphoma. *J Clin Oncol*, 2013, 31, s. 456–460.
- 22 Angenendt, L. – Schliemann, C. – Lutz, M., et al.: Nivolumab in a patient with refractory Hodgkin's lymphoma after allogeneic stem cell transplantation. *Bone Marrow Transplant*, 2016, 51, s. 443–445.
- 23 Villasboas, J. C. – Ansell, S. M. – Witzig, T. E.: Targeting the PD-1 pathway in patients with relapsed classic Hodgkin lymphoma following allogeneic stem cell transplant is safe and effective. *Oncotarget*, 2016, 7, s. 13260–13264.

Dasatinib – účinná léčba chronické myeloidní leukemie a plánované těhotenství

MUDr. Hana Klamová, CSc.

Ústav hematologie a krevní transfuze, Ústav klinické a experimentální hematologie 1. LF UK, Praha

- 1 Abruzzese, E., et al.: Management of pregnant chronic myeloid leukemia patients. *Expert Rev Hematol*, 2016, 9, s. 781.
- 2 Law, A. D., et al.: Pregnancy: part of life in chronic myelogenous leukemia. *Leuk Lymphoma*, 2017, 58, s. 280.
- 3 Palani, R., et al.: Managing pregnancy in chronic myeloid leukaemia. *Ann Hematol*, 2015, 94, suppl. 2, s. 167–176.
- 4 SPC Sprycel, 2/2017.
- 5 Kuwabara, A., et al.: Poor outcome after reintroduction of imatinib in patients with chronic myeloid leukemia who interrupt therapy on account of pregnancy without having achieved an optimal response. *Blood*, 2010, 116, s. 1014.
- 6 Mahon, F. X., et al.: Discontinuation of imatinib in patients with chronic myeloid leukaemia who have maintained complete molecular remission for at least 2 years: the prospective, multicentre Stop Imatinib (STIM) trial. *Lancet Oncol*, 2010, 11, s. 1029.
- 7 Mahon, F. X. – Nicolini, F. E. – Noë, M. P., et al.: Preliminary report of the STIM2 Study: A multicenter Stop Imatinib trial for chronic phase chronic myeloid leukemia de novo patients on imatinib. *Blood*, 2013, 122, s. 654.
- 8 Rousselot, P., et al.: Loss of major molecular response as a trigger for restarting tyrosine kinase inhibitor therapy in patients with chronic-phase chronic myelogenous leukemia who have stopped imatinib after durable undetectable disease. *J Clin Oncol*, 2014, 32, s. 424.
- 9 Rea, D. – Rousselot, P. – Guilhot, F., et al.: Discontinuation of second generation tyrosine kinase inhibitors in chronic phase chronic myeloid leukemia patients with stable undetectable BCR-ABL transcripts. *Blood*, 2012, 120, s. 916.
- 10 Imagawa, J., et al.: Discontinuation of dasatinib in patients with chronic myeloid leukemia who have maintained deep molecular response for longer than 1 year (DADI Trial): A multicentre phase 2 trial. *Lancet Haematol*, 2015, 2, s. e528–e535.
- 11 Shah, N. P., et al.: Intermittent target inhibition with dasatinib 100 mg once daily preserves efficacy and improves tolerability in imatinib-resistant and -intolerant chronic-phase chronic myeloid leukemia. *J Clin Oncol*, 2008, 26, s. 3204.
- 12 Cortes, J. E., et al.: Efficacy of dasatinib in patients (pts) with previously untreated chronic myelogenous leukemia (CML) in early chronic phase (CML-CP). *Blood*, 2008, 112, s. 182.
- 13 Oweini H. – Otrouk, Z. K. – Mahfouz, R. A., et al.: Successful pregnancy involving a man with chronic myeloid leukemia on dasatinib. *Arch Gynecol Obstet*, 2011, 283, s. 133.
- 14 Bayraktar, S. – Eileen, B.-S. – Hariatmadar, S., et al.: Concurrent thrombotic thrombocytopenic purpura and immune thrombocytopenic purpura in a patient with metastatic neuroendocrine tumour successfully treated with rituximab-CVP. *BMJ Case Reports*, 2010, doi:10.1136/bcr.05.2010.2975.
- 15 Cortes, J. – O'Brien, S. – Ault, P., et al.: Pregnancy outcomes among patients with chronic myeloid leukemia treated with dasatinib. *Blood*, 2008, 112, abstrakt 3230.
- 16 Berveiller, P. – Andreoli, A. – Mir, O., et al.: A dramatic fetal outcome following transplacental transfer of dasatinib. *Anticancer Drugs*, 2012, 23, s. 754–757.
- 17 He, K. – Lago, M. W. – Iyer, R. A., et al.: Lactate secretion, fetal and maternal tissue distribution of dasatinib in rats. *Drug Metab Dispos*, 2008, 36, s. 2564.
- 18 Klamová, H. – Marková, M. – Moravcová, J. – Sisková, M. – Cetkovský, P. – Machová Poláková, K.: Response to treatment in women with chronic myeloid leukemia during pregnancy and after delivery. *Leuk Res*, 2009, 33, s. 1567–1569.
- 19 Pavlovsky, C. – Giere, I. – Van Thillo, G.: Planned pregnancy in a chronic myeloid leukemia patient in molecular remission. *Case Reports in Hematology*, 2012, ID 624590.
- 20 Shah, N. P. – Rousselot, P. – Schiffer, C., et al.: Dasatinib in imatinib-resistant or -intolerant chronic-phase, chronic myeloid leukemia patients: 7-year follow-up of study CA180-034. *Am J Hematol*, 2016, 91, s. 869–874.

Pembrolizumab v léčbě pokročilého maligního melanomu

MUDr. Radek Lakomý, Ph.D. | MUDr. Alexandr Poprach, Ph.D. | MUDr. Renata Koukalová

Klinika komplexní onkologické péče, MOÚ a LF MU, Brno

- 1 Robert, C. – Karaszewska, B. – Schachter, J., et al.: Improved overall survival in melanoma with combined dabrafenib and trametinib. *N Engl J Med*, 2015, 372, s. 30–39.
- 2 Larkin, J. – Ascierto, P. A. – Dreno, B., et al.: Combined vemurafenib and cobimetinib in BRAF-mutated melanoma. *N Engl J Med*, 2014, 371, s. 1867–1876.
- 3 Hodi, F. S. – O'Day, S. J. – McDermott, D. F., et al.: Improved survival with ipilimumab in patients with metastatic melanoma. *N Engl J Med*, 2010, 363, s. 711–723.
- 4 Robert, C. – Thomas, L. – Bondarenko, I., et al.: Ipilimumab plus dacarbazine for previously untreated metastatic melanoma. *N Engl J Med*, 2011, 364, s. 2517–2526.
- 5 Weber, J. S. – D'Angelo, S. P. – Minor, D., et al.: Nivolumab versus chemotherapy in patients with advanced melanoma who progressed after anti-CTLA-4 treatment (CheckMate 037): a randomised, controlled, open-label, phase 3 trial. *Lancet Oncol*, 2015, 16, s. 375–384.
- 6 Robert, C. – Long, G. V. – Brady, B., et al.: Nivolumab in previously untreated melanoma without BRAF mutation. *N Engl J Med*, 2015, 372, s. 320–330.
- 7 Hamid, O. – Robert, C. – Daud, A., et al.: Safety and tumor responses with lambrolizumab (Anti-PD-1) in melanoma. *N Engl J Med*, 2013, 369, s. 134–144.
- 8 Robert, C. – Dinas, A. – Wolchok, J. D., et al.: Anti-programmed-death-receptor-1 treatment with pembrolizumab in ipilimumab-refractory advanced melanoma: a randomised dose-comparison cohort of a phase 1 trial. *Lancet*, 2014, 384, s. 1109.
- 9 Duad, A. – Dinas, A. – Robert, C., et al.: Long-term efficacy of pembrolizumab (pembro; MK-3475) in a pooled analysis of 655 patients (pts) with advanced melanoma (MEL) enrolled in KEYNOTE-001. *J Clin Oncol*, 2015, 33, suppl., abstrakt 9005.
- 10 Robert, C. – Dinas, A. – Hamid, O., et al.: Three-year overall survival for patients with advanced melanoma treated with pembrolizumab in KEYNOTE-001. *J Clin Oncol*, 2016, 34, suppl., abstrakt 9503.
- 11 Dinas, A. – Puzanov, I. – Dummer, R., et al.: Pembrolizumab versus investigator-choice chemotherapy for ipilimumab-refractory melanoma (KEYNOTE-002): a randomised, controlled, phase 2 trial. *Lancet Oncol*, 2015, 16, s. 908.
- 12 Robert, C. – Schachter, J. – Long, G. V., et al.: Pembrolizumab versus ipilimumab in advanced melanoma. *N Engl J Med*, 2015, 372, s. 2521–2532.
- 13 Schachter, J. – Dinas, A. – Ling, G. V., et al.: Pembrolizumab versus ipilimumab for advanced melanoma: Final overall survival analysis of KEYNOTE-006. *J Clin Oncol*, 2016, 34, suppl., abstrakt 9504.
- 14 Hodi, F. S. – Dinas, A. – Daud, A., et al.: Evaluation of immune-related response criteria (irRC) in patients (pts) with advanced melanoma (MEL) treated with the anti-PD-1 monoclonal antibody MK-3475. *J Clin Oncol*, 2014, 32, 5s, suppl., abstrakt 3006.
- 15 Weber, J. S. – Yang, J. C. – Atkins, M. B., et al.: Toxicities of immunotherapy for the practitioner. *J Clin Oncol*, 2015, 33, s. 2092–2099.
- 16 Menzies, A. M. – Johnson, D. B. – Ramanujam, S., et al.: Anti-PD-1 therapy in patients with advanced melanoma and preexisting autoimmune disorders (AD) or major toxicity with ipilimumab (IP). *J Clin Oncol*, 2016, 34, suppl., abstrakt 9515.
- 17 Daud, A. – Blank, C. U. – Robert, C., et al.: KEYNOTE-006 study of pembrolizumab (pembro) versus ipilimumab (ipi) for advanced melanoma: Efficacy by PD-L1 expression and line of therapy. *J Clin Oncol*, 2016, 34, suppl., abstrakt 9513.

Necytostatická kombinace kyseliny all-trans-retinové a oxidu arsenitého v terapii nově diagnostikované akutní promyelocytární leukemie

MUDr. Zdeněk Kořístek, Ph.D. | MUDr. Petra Richterová Klinika hematologie, FN Ostrava

- 1 Shen, Z. X. – Chen, G. Q. – Ni, J. H., et al.: Use of arsenic trioxide (As₂O₃) in the treatment of acute promyelocytic leukemia (APL): II. Clinical efficacy and pharmacokinetics in relapsed patients. *Blood*, 1997, 89, s. 3354–3360.
- 2 Soignet, S. L. – Maslak, P. – Wang, Z. G., et al.: Complete remission after treatment of acute promyelocytic leukemia with arsenic trioxide. *N Engl J Med*, 1999, 339, s. 1341–1348.
- 3 Soignet, S. L.: Clinical experience of arsenic trioxide in relapsed acute promyelocytic leukemia. *Oncologist*, 2001, 6, suppl. 2, s. 11–16.
- 4 Soignet, S. L. – Frankel, S. R. – Douer, D., et al.: United States Multi-center study of arsenic trioxide in relapsed acute promyelocytic leukemia. *J Clin Oncol*, 2001, 19, s. 3852–3860.
- 5 Douer, D. – Hu, W. – Giral, S., et al.: Arsenic trioxide (trisenox) therapy for acute promyelocytic leukemia in the setting of hematopoietic stem cell transplantation. *Oncologist*, 2003, 8, s. 132–140.
- 6 Shen, Z. X. – Shi, Z. Z. – Fang, J., et al.: All-trans retinoic acid/As₂O₃ combination yields a high quality remission and survival in newly diagnosed acute promyelocytic leukemia. *Proc Natl Acad Sci USA*, 2004, 101, s. 5328–5335.
- 7 Estey, E. – Garcia-Manero, G. – Ferrajoli, A., et al.: Use of all-trans retinoic acid plus arsenic trioxide as an alternative to chemotherapy in untreated acute promyelocytic leukemia. *Blood*, 2006, 107, s. 3469–3473.
- 8 Lo-Coco, F. – Avvisati, G. – Vignetti, M., et al.: Retinoic acid and arsenic trioxide for acute promyelocytic leukemia. *N Engl J Med*, 2013, 369, s. 111–121.
- 9 Platzbecker, U. – Avvisati, G. – Cicconi, L., et al.: Improved outcomes with retinoic acid and arsenic trioxide compared with retinoic acid and chemotherapy in non-high-risk acute promyelocytic leukemia: final results of the randomized Italian-German APL0406 trial. *J Clin Oncol*, 2017, 35, s. 605–612.
- 10 Dostupné z: www.nccn.org/professionals/physician_gls/f_guidelines.asp#aml, vyhledáno 4. 4. 2017.
- 11 Dostupné z: http://www.ema.europa.eu/ema/pages/includes/document/open_document.jsp?webContentId=WC500214157, vyhledáno 4. 4. 2017.
- 12 Francesco Lo-Coco, osobní komunikace během kongresu EHA, 9. 6. 2016, Kodaň, Dánsko.

Ibrutinib jako přemostění k alogenní transplantaci kostní dřeně

doc. MUDr. Pavel Klener jr., Ph.D. I. interní klinika – hematologie VFN a 1. LF UK, Praha

- 1 Cheah, C. Y. – Seymour, J. F. – Wang, M. L.: Mantle cell lymphoma. *J Clin Oncol*, 2016, 34, s. 1256–1269.
- 2 Dreyling, M. – Ferrero, S.: The role of targeted treatment in mantle cell lymphoma: is transplant dead or alive? *Haematologica*, 2016, 101, s. 104–114.
- 3 Tessoulin, B. – Ceballos, P. – Chevalier, P., et al.: Allogeneic stem cell transplantation for patients with mantle cell lymphoma who failed autologous stem cell transplantation: a national survey of the SFGM-TC. *Bone Marrow Transplant*, 2016, 51, s. 1184–1190.
- 4 Vaughn, J. E. – Horror, M. L. – Stoper, B. E., et al.: Long-term sustained disease control in patients with mantle cell lymphoma with or without active disease after treatment with allogeneic hematopoietic cell transplantation after nonmyeloablative conditioning. *Cancer*, 2015, 121, s. 3709–3716.
- 5 Lee, H. J. – Gallardo, M. – Ma, H., et al.: p53-independent ibrutinib responses in an Emu-TCL1 mouse model demonstrates efficacy in high-risk CLL. *Blood Cancer J*, 2016, 6, s. e434.
- 6 Wang, M. L. – Rule, S. – Martin, P., et al.: Targeting BTK with ibrutinib in relapsed or refractory mantle-cell lymphoma. *New Eng J Med*, 2013, 369, s. 507–516.
- 7 Dreyling, M. – Jurczak, W. – Jerkeman, M., et al.: Ibrutinib versus temsirolimus in patients with relapsed or refractory mantle-cell lymphoma: an international, randomised, open-label, phase 3 study. *Lancet (London)*, 2016, 387, s. 770–778.
- 8 Tucker, D. L. – Naylor, G. – Kruger, A., et al.: Ibrutinib is a safe and effective therapy for systemic mantle cell lymphoma with central nervous system involvement – a multi-centre case series from the United Kingdom. *Br J Haematol*, 16. 5. 2016, doi: 10.1111/bjh.14122.
- 9 Martin, P. – Maddocks, K. – Leopard, J. P., et al.: Postibrutinib outcomes in patients with mantle cell lymphoma. *Blood*, 2016, 127, s. 1559–1563.
- 10 Cheah, C. Y. – Chihara, D. – Romaguera, J. E., et al.: Patients with mantle cell lymphoma failing ibrutinib are unlikely to respond to salvage chemotherapy and have poor outcomes. *Ann Oncol*, ESMO, 2015, 26, s. 1175–1179.
- 11 Horror, M. – Stoper, B. – Sandmaier, B. M., et al.: Hematopoietic cell transplantation-comorbidity index and Karnofsky performance status are independent predictors of morbidity and mortality after allogeneic nonmyeloablative hematopoietic cell transplantation. *Cancer*, 2008, 112, s. 1992–2001.
- 12 Horror, M. L. – Maris, M. B. – Strober, R., et al.: Hematopoietic cell transplantation (HCT)-specific comorbidity index: a new tool for risk assessment before allogeneic HCT. *Blood*, 2005, 106, s. 2912–2919.

Ibrutinib v léčbě opakovaně relabující nemocné s chronickou lymfocytární leukemií / lymfomem z malých lymfocytů s nepříznivými genetickými změnami a postižením skeletu

MUDr. Pavlína Ryznerová Hemato-onkologická klinika FN a LF UP, Olomouc
MUDr. Lenka Henzlová Klinika nukleární medicíny FN a LF UP, Olomouc
prof. MUDr. Tomáš Papajík, CSc. Hemato-onkologická klinika FN a LF UP, Olomouc

- 1 Varma, G. – Johnson, T. P. – Advani, R. H.: Bruton's tyrosine kinase inhibitors in chronic lymphocytic leukemia and lymphoma. *Clin Adv Hematol Oncol*, 2016, 14, s. 543–554.
- 2 Brown, J. R. – Hallek, M. J. – Pagel, J. M.: Chemoimmunotherapy versus targeted treatment in chronic lymphocytic leukemia: when, how long, how much, and in which combination? *Am Soc Clin Oncol Educ Book*, 2016, 35 s. e387–e398.
- 3 Thompson, P. A. – O'Brien, S. M. – Xiao, L., et al.: β 2-microglobulin normalization within 6 months of ibrutinib-based treatment is associated with superior progression-free survival in patients with chronic lymphocytic leukemia. *Cancer*, 2016, 122, s. 565–573.

Úspěšná léčba ibrutinibem u pacientky s chronickou lymfocytární leukemií a nutností antiagregační terapie

MUDr. Jakub Trizuljak | prof. MUDr. Michael Doubek, Ph.D.
Interní hematologická a onkologická klinika LF MU, CEITEC MU a FN, Brno

- 1 Byrd, J. C. – Brown, J. R. – O'Brien, S., et al.: Ibrutinib versus ofatumumab in previously treated chronic lymphoid leukemia. *N Engl J Med*, 2014, 371, s. 213–223.
- 2 Wang, M. L. – Rule, S. – Martin, P., et al.: Targeting BTK with ibrutinib in relapsed or refractory mantle-cell lymphoma. *N Engl J Med*, 2013, 369 s. 507–516.
- 3 Liu, J. – Fitzgerald, M. E. – Berndt, M. C., et al.: Bruton tyrosine kinase is essential for botrocetin/VWF-induced signaling and GPIIb-dependent thrombus formation in vivo. *Blood*, 2006, 108 s. 2596–2603.
- 4 Farooqui, M.: Ibrutinib rapidly improves platelet counts in CLL/SLL patients and has minimal effects on platelet aggregation. ASH 2012, abstrakt 1789.
- 5 Lipsky, A. H. – Farooqui, M. Z. – Tian, X., et al.: Incidence and risk factors of bleeding-related adverse events in patients with chronic lymphocytic leukemia treated with ibrutinib. *Haematologica*, 2015, 100 s. 1571–1578.

Subkutánní imunoglobuliny v dětském věku a v domácím prostředí

Veronika Čepeláková | MUDr. Petra Keslová | Blanka Nagyová | MUDr. Petr Smíšek |
MUDr. Martina Suková Klinika dětské hematologie a onkologie FN v Motole, Praha

- 1 Martin, A. – Lavole, E. – Goetghebeur, M., et al.: Economic benefits of subcutaneous rapid push versus intravenous immunoglobulin infusion therapy in adults patients with primary immune deficiency. *Transfusion Med*, 2012, s. 55–60.
- 2 Casulo, C. – Maraguela, J. – Zelenetz, A. J.: Incidence of hypogammaglobulinemia in patients receiving rituximab and the use of intravenous immunoglobulin for recurrent infections. *Clin Lymphoma Myeloma Leuk*, 2013, 13, s. 106–111.
- 3 Jolles, S. – Chapel, J. – Litzman, J.: When to initiate immunoglobulin replacement therapy (IGRT) in antibody deficiency: a practical approach. *Cur Opin Rheum*, 2017, 29, s. 228–233.
- 4 Compagno, N. – Cinneto, F. – Semenzato, G., et al.: Subcutaneous immunoglobulin in lymphoproliferative disorders and rituximab – related secondary hypogammaglobulinemia: A single center experience in 61 patients. *Hematologica*, 2015, 99, s. 1101–1105.