

EDITORIAL

The 2nd Conference of the Romanian Society of Immuno-Dermatology, Bucharest, September 27-29, 2018

MONICA NEAGU¹⁻³ and DANIEL BODA⁴

¹Immunobiology Laboratory, 'Victor Babes' National Institute of Pathology, 050096 Bucharest; ²Faculty of Biology, University of Bucharest, 050107 Bucharest; ³Department of Pathology, Colentina Clinical Hospital, 020125 Bucharest; ⁴Dermatology Research Laboratory, 'Carol Davila' University of Medicine and Pharmacy, 050474 Bucharest, Romania

Received December 3, 2018; Accepted February 7, 2019

DOI: 10.3892/ol.2019.10080

With the advent of immunotherapy validated in skin cancer, immuno-oncology has gained an unprecedented momentum. The first conference of Immuno-Dermatology has gathered several important communications in skin cancer, lectures that were further expanded in the articles presented in this special issue. The articles are divided into two segments: Non-melanoma skin cancers and melanoma cancers, approaching diagnosis, new therapies and monitoring through innovative technologies, as well as experimental models.

In the non-melanoma skin cancers section, Cioplea *et al* (1) are describing, in a retrospective study, the immunohistochemical characterization of dendritic cell distribution, which can be an adjuvant tool in the differential diagnosis of inflammatory dermatosis and skin lymphomas. Tanase *et al* (2) review the anti-angiogenic therapeutic protocols in T cell-lymphomas targeting the tumor vasculature or malignant tumor cells directly or through a large number of combinations with other drugs. Reviewing the inflammation process in skin tumorigenesis, Neagu *et al* (3) outline that in skin cancers, inflammatory markers can find their place in the biomarkers set in order to improve diagnosis and prognosis. Tampa *et al* (4) present the most recent findings in photodynamic therapy, with emphasis on cutaneous precancerous lesions.

In terms of diagnosis techniques, Ianoși *et al* (5) present an improved management on Bowen's disease by using non-invasive, *in vivo* imaging techniques that allow for a rapid and simple diagnosis and follow-up. Investigating imaging monitoring, Ilie *et al* (6) presented confocal microscopy

diagnostic features that can differentiate between the various histological subtypes of skin tumors, thus aiding in the selection of the optimal therapeutic approach. In basal cell carcinomas, Lupu *et al* (7) correlate dermoscopy and reflectance confocal microscopy to investigate vascular patterns in non-melanoma skin cancer and to evaluate the power of discriminating aggressive subtypes. Balanescu *et al* (8) present a series of carcinoid heart disease cases, a rare complication of neuroendocrine tumors, for which a comprehensive imaging assessment is needed in order to establish an optimal surgical timing; moreover a good collaboration between the Oncology and Cardiology teams is essential for long term disease management.

Popa *et al* (9) present a novel classification that aims to better organize the different types of acanthosis nigricans, with implications on the extent and urgency of the investigation plan, as well as various therapeutic algorithms.

The majority of the articles in this Special Issue focus on cutaneous melanoma diagnostics, therapy, incidence and even experimental melanoma models.

Fechete *et al* (10) document and compare melanoma risk factors and skin health behavior in patients diagnosed with melanoma and individuals not affected by this disease in the North-West of Romania. Rotaru *et al* (11) point out that as their 10-year retrospective study of melanoma stage at diagnosis has revealed >40% stage IV disease at presentation, intensified efforts are required to improve the early detection of melanoma.

Nichita *et al* (12) present CEACAM1 as a molecular marker in melanomas. In thin melanomas, CEACAM1 over-expression is associated with invasiveness, while in areas of regression, tumor cells lose CEACAM1 expression, probably associated with the presence of natural killer (NK) cells. Antohe *et al* (13) discuss the current state of knowledge in the field of immune cells that infiltrate melanoma, resuming the potential of TIL components to become prognostic markers for natural evolution, for response to drugs or valuable targets for new medication.

By investigating vitamin D receptor polymorphism, Vasilovici *et al* (14) show that the vitamin D pathway is impor-

Correspondence to: Dr Monica Neagu, Immunobiology Laboratory, 'Victor Babes' National Institute of Pathology, 99-101 Splaiul Independentei, 050096 Bucharest, Romania
E-mail: monica.neagu@ivb.ro; neagu.monica@gmail.com

Key words: immunotherapy, skin cancer, immuno-oncology, immuno-dermatology

tant for the pathogenesis and the progression of cutaneous melanoma, illustrating the gene-environment interactions.

Since brain metastases in cutaneous melanoma represent the most difficult stage regarding treatment, Buga *et al* (15) present the cellular and molecular changes, the immune status of the patient and the blood brain barrier permeability as being the key regulators of cancer cells dissemination. Grigore *et al* (16) present a case study of complete regression of the primary melanoma under BRAF inhibitors.

Maranduca *et al* (17) review the recent data regarding melanogenesis physiology as regulated by stimulant melanocytic hormone, adrenocorticotropin hormone, estrogens and progesterone.

Ancuceanu *et al* (18) present the development of QSAR models able to predict the cytotoxic effect of diverse chemical compounds on SK-MEL-5 in a human melanoma cell line.

Last, but not least, the experimental model presented by Isvoranu *et al* (19) show that, in a melanoma-bearing mouse model, the percentage of NK cells and their phenotype is different compared to control mouse NK cells, providing evidence that NK cell activation may constitute future reliable therapy targets in melanoma.

We would like to thank the authors who submitted their articles for consideration to this Special Issue, which would have not materialized without their efforts. The Editors would like to thank the reviewers who thoroughly revised the articles and provided important suggestions that significantly improved the articles.

References

1. Cioplea M, Caruntu C, Zurac S, Bastian A, Sticlaru L, Cioroianu A, Boda D, Jugulete G, Nichita L and Popp C: Dendritic cell distribution in mycosis fungoides vs. inflammatory dermatosis and other T-cell skin lymphoma. *Oncol Lett* 17: 4055-4059, 2019.
2. Tanase T, Popescu ID, Enciu AM, Gheorghisan-Galateanu AA, Codrici E, Mihai S, Albulescu L, Necula L and Albulescu R: Angiogenesis in cutaneous T-cell lymphoma - proteomic approaches (Review). *Oncol Lett* 17: 4060-4067, 2019.
3. Neagu M, Constantin C, Caruntu C, Dumitru C, Surcel M and Zurac S: Inflammation: A key process in skin tumorigenesis (Review). *Oncol Lett* 17: 4068-4084, 2019.
4. Tampa M, Sarbu MI, Matei C, Mitran CI, Mitran MI, Caruntu C, Constantin C, Neagu M and Georgescu SR: Photodynamic therapy: A hot topic in dermato-oncology (Review). *Oncol Lett* 17: 4085-4093, 2019.
5. Ianoși SL, Batani A, Ilie MA, Tampa M, Georgescu SR, Zurac S, Boda D, Ianoși NG, Neagoe D, Calina D, *et al*: Non-invasive imaging techniques for the in vivo diagnosis of Bowen's disease: Three case reports. *Oncol Lett* 17: 4094-4101, 2019.
6. Ilie MA, Caruntu C, Lupu M, Lixandru D, Tampa M, Georgescu SR, Bastian A, Constantin C and Neagu M: Current and future applications of confocal laser scanning microscopy imaging in skin oncology (Review). *Oncol Lett* 17: 4102-4111, 2019.
7. Lupu M, Caruntu C, Popa MI, Voiculescu VM, Zurac S and Boda D: Vascular patterns in basal cell carcinoma: Dermoscopic, confocal and histopathological perspectives (Review). *Oncol Lett* 17: 4112-4125, 2019.
8. Balanescu DV, Donisan T, Lopez-Mattei J, Hassan S, Kim P, Dasari A, Halperin D, Yao J, Kar B, Gregoric I, *et al*: The 1, 2, 3, 4 of carcinoid heart disease: Comprehensive cardiovascular imaging is the mainstay of complex surgical treatment (Review). *Oncol Lett* 17: 4126-4132, 2019.
9. Popa ML, Popa AC, Tanase C and Gheorghisan-Galateanu AA: Acanthosis nigricans: To be or not to be afraid (Review). *Oncol Lett* 17: 4133-4138, 2019.
10. Fehete O, Ungureanu L, Șenilă S, Vornicescu D, Dănescu S, Vasilovici A, Candrea E, Vesa SC and Cosgarea R: Risk factors for melanoma and skin health behaviour: An analysis on Romanian melanoma patients. *Oncol Lett* 17: 4139-4144, 2019.
11. Rotaru M, Jitian CR and Iancu GM: A 10-year retrospective study of melanoma stage at diagnosis in the academic emergency hospital of Sibiu county. *Oncol Lett* 17: 4145-4148, 2019.
12. Nichita L, Zurac S, Bastian A, Stinga P, Nedelcu R, Brinzea A, Turcu G, Ion D, Jilaveanu L, Ion DA, *et al*: Tumor infiltrating lymphocytes: The regulator of melanoma evolution (Review). *Oncol Lett* 17: 4149-4154, 2019.
13. Antohe M, Nedelcu RI, Nichita L, Popp CC, Cioplea M, Brinzea A, Hodoroagea A, Calinescu A, Balaban M: Tumor infiltrating lymphocytes: The regulator of melanoma evolution (Review). *Oncol Lett* 17: 4155-4161, 2019.
14. Vasilovici AF, Grigore LE, Ungureanu L, Fehete O, Candrea E, Trifa AP, Vișan S, Șenilă S and Cosgarea R: Vitamin D receptor polymorphisms and melanoma (Review). *Oncol Lett* 17: 4162-4169, 2019.
15. Buga AM, Docea AO, Albu C, Malin RD, Branisteanu DE, Ianoși G, Ianoși SL, Iordache A and Calina D: Molecular and cellular stratagem of brain metastases associated with melanoma (Review). *Oncol Lett* 17: 4170-4175, 2019.
16. Grigore LE, Ungureanu L, Bejinariu N, Seceac C, Vasilovici A, Senila SC, Candrea E, Fehete O and Cosgarea R: Complete regression of primary melanoma associated with nevi involution under BRAF inhibitors: A case report and review of the literature. *Oncol Lett* 17: 4176-4182, 2019.
17. Maranduca MA, Branisteanu D, Serban DN, Branisteanu C, Stoleriu G, Manolache N and Serban IL: Synthesis and physiological implications of melanic pigments (Review). *Oncol Lett* 17: 4183-4187, 2019.
18. Ancuceanu R, Dinu M, Neaga I, Laszlo FG and Boda D: Development of QSAR machine learning-based models to forecast the effect of substances on malignant melanoma cells. *Oncol Lett* 17: 4188-4196, 2019.
19. Isvoranu G, Surcel M, Huică RI, Munteanu AN, Pîrvu IR, Ciotaru D, Constantin C, Bratu O, Neagu M and Ursaciuc C: Natural killer cell monitoring in cutaneous melanoma - new dynamic biomarker. *Oncol Lett* 17: 4197-4206, 2019.



This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) License.