The new developments and events in Balneology may be summarized as follows:

1. Balneology/ISMH goes global; moving from Japan to Brazil and then to Asia to Africa so on; in recent years, interest in Medical Balneology and Hydro-climatology is being intensified all over the world. We have now a growing number of published balneological articles originated from various countries and the centers in different locations. Japan is the country of “onsen” and “ryokan” which is going to host the 39th ISMH Congress along with their national balneology congress. Brazil is being prepared for the 40th Congress of ISMH in Rio de Janeiro and ABINAM (Brazilian Association of Mineral Waters) will support the congress. Among the balneology organizations North American, Russian, Indian and Chinese associations are on the way.

2. Effects of complexity in the balneological therapy protocols; a need for most effective combinations for certain conditions; In many countries, balneological interventions are being applied in complex character. Depending on the local natural remedies and the experience balneotherapy (thermal mineral water baths) is combined mostly with peloidotherapy (mud applications). Furthermore drinking cures, inhalations and other balneological interventions are also being combined for treating a diversity of conditions in different countries. But the most effective complex balneology treatments for certain diseases remain to be tested.

3. Beyond the treatment of rheumatic diseases; dermatologic and other indications are being investigated: Balneotherapy and spa therapy is being increasingly considered in the evidence based treatment guidelines for rheumatic diseases, including osteoarthritis, fibromyalgia, ankylosing spondylitis, early arthritis, rheumatoid arthritis and low back pain. Among other indications of balneotherapy dermatological diseases are in the first place. The studies aiming to investigate the therapeutic effects of balneological treatments on cardiovascular, metabolic, neurological, psychiatric and respiratory conditions are being published in recent two years.

4. The preventive effects of balneological treatments; an old remedy for contemporary health risks: Research interest in the beneficial and health effects of balneological applications is growing as a need for measures to modify the major health risks of our time. Recently published scientific balneological trials report the scientific evidence on the preventive effects of balneotherapy and spa therapy cures on metabolic syndrome, overweight and obesity as well as cognitive function and physiological status.

5. More insights into effects of local natural spa waters and specific chemical components of balneological waters; Authors from various disciplines are publishing the studies evaluating the specific effects of local natural spa water and mud used in balneological treatments and effects of specific chemical components of balneological waters. Besides the clinical trials
with biological markers measurements, some other publications reported the results obtained from cell cultures and experimental animal models studies and shed more light on the specific biological effects of a given balneological remedy and specific elements of the mineral water in particular sulfur and carbon dioxide.

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