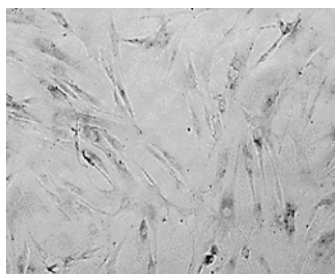
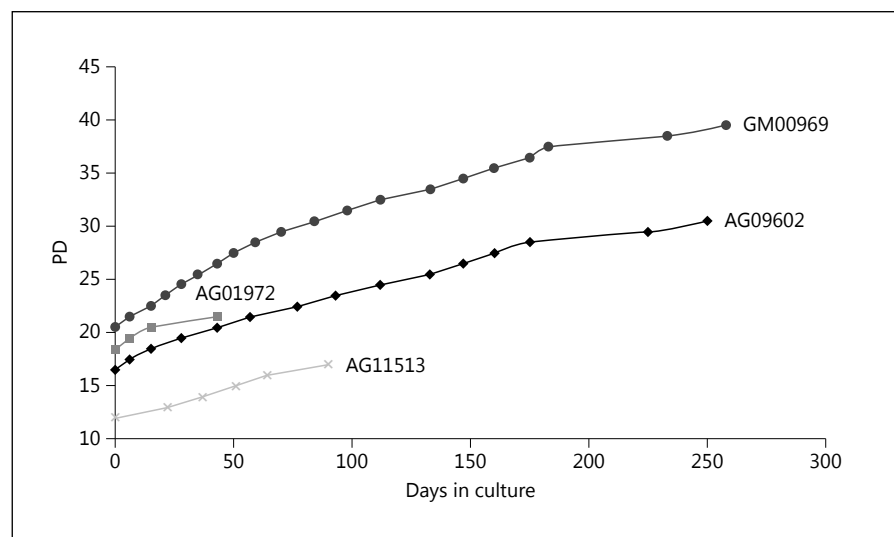
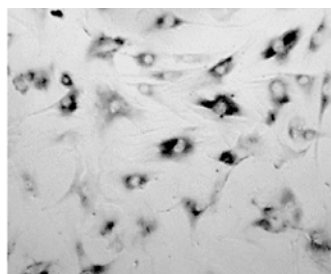


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Exploring the Basis of Disease



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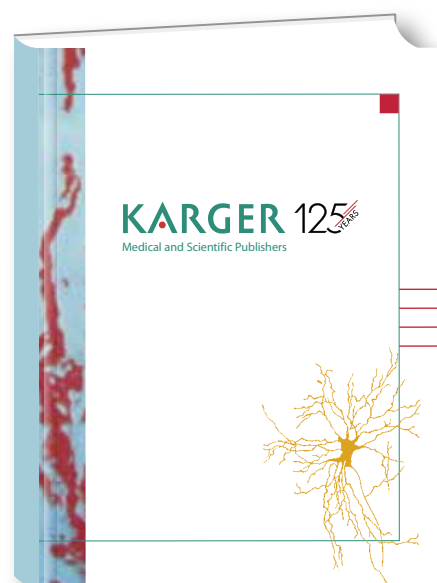
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Editor  
Abeer M. Shaaban

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Breast translational research has markedly evolved over the past few decades and the emerging knowledge has revolutionized our understanding of breast neoplasms. Novel techniques and concepts in studying breast cancer have been developed. These have contributed to the understanding and recognition of this complex disease.

This special topic issue on *Breast Translational Research* provides pertinent and succinct reviews on tumor microenvironment, metabolomics, the role of the calpain family of enzymes, the molecular mechanisms of lymphovascular invasion, and predictors of response to neoadjuvant therapy. It proposes and illustrates a new terminology for the practising pathologist who needs to describe a diagnostically challenging group of breast neoplasms showing dermal analogue differentiation. It also evaluates the role of p40 immunohistochemistry in diagnostic breast pathology.

This publication is of special interest to pathologists as well as scientists and members of the breast multidisciplinary team, since it provides a useful overview of pertinent markers and techniques in the field of breast cancer translational research and diagnostic histopathology.

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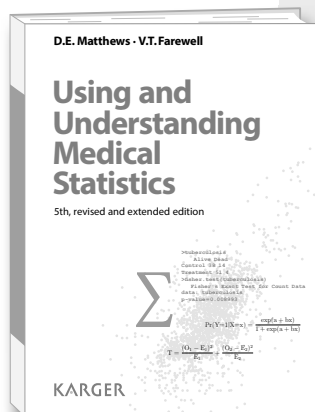
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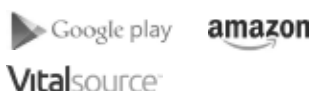
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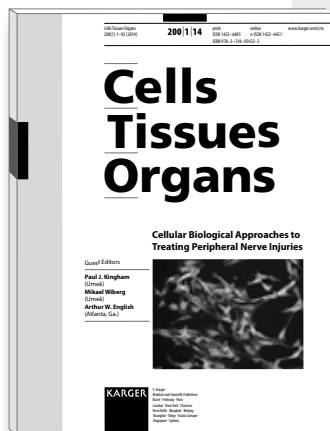
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Functional recovery after peripheral nerve injury is poor, and it has become clear that surgical reconstruction should be combined with novel therapies which address the problems of the limited rate and quantity of axonal regeneration, neuronal cell death and target organ atrophy. There is significant scope for the application of cellular and biological approaches towards peripheral nerve repair. This special topics issue begins with an introduction to the importance of Schwann cell-axon interactions which is followed by a series of papers highlighting the exciting therapeutic potential of various cell types including skin, adipose, bone marrow and hair follicle-derived adult stem cells, induced pluripotent stem cells and olfactory ensheathing cells. Another biological approach, the use of chondroitinase to overcome nerve scarring, is also described. Finally, noninvasive imaging methods, which will be necessary to determine the efficacy of these novel treatments, are reviewed.

The publication will be of interest to a large number of interdisciplinary scientists including cell biologists, biomaterials scientists and chemists as well as surgeons who are involved in translational research aimed at improving the treatment of peripheral nerve injury.

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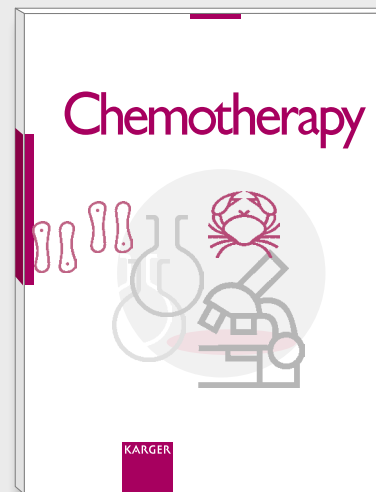
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