



## The Last Word

### Dr Ahmed Al-Qahtani addresses the misrepresentation of stem cell skincare products and advises practitioners on how to avoid unsupported advertising claims

Since the 1980s, results of research into the efficacy of stem cell treatment has emerged as a major topic of debate.<sup>1</sup> Until recently, stem cells have acquired a largely negative reputation due to a misinformed public. Many people have automatically affiliated stem cells with embryonic stem cells, where a potential human or animal life is lost.<sup>1</sup> Embryonic stem cells are grown from cells found in the embryo when it is just a few days old.<sup>2</sup> They have been used by scientists to research a range of medical conditions, including the formation of cancer, and aid the understanding of how cells respond to certain drugs.<sup>2</sup> This, however, means the embryo has to be destroyed, which has invited a significant amount of debate from those who argue an embryo should be regarded as a human or animal life.<sup>1</sup> From my experience, however, it seems that many people hadn't realised until recently that, as well as embryonic, there are also such things as plant stem cells and stem cells found within us. There has been an abundant amount of 'adult stem cells' found within tissues like bone marrow, fat, muscle, and skin.<sup>3,4</sup> In the past decade, there have been huge advances in the field of adult stem cell research and therapy. From orthopedics and neurology, to autoimmunity and of course aesthetics and plastic surgery, these advances are revolutionary.<sup>5</sup> Skin stem cells have been used to grow new skin in a laboratory for burn patients,<sup>6</sup> which has of course invited an interest into other potential skin rejuvenating properties of stem cells.

#### Stem cells and skincare

Most of the hype is evolved from a desire to reverse the signs of ageing by growing

new, healthier skin. The stem cell era acted as a beacon of hope, delivering promises, solutions and infinite cues to many skincare battles. As a result of the advances, the term 'stem cell' has become unduly misused within the field of cosmetics and aesthetics. From the 'stem cell face lift', to the 'stem cell face cream', medical practitioners and cosmetic manufacturers alike are cashing in on this buzzword. It truly is an effective marketing strategy to claim that their ingredients are either derived from stem cells or stimulate the growth of stem cells. But in reality, many don't contain stem cells at all.

#### Unsubstantiated marketing claims

It seems that opportunistic skincare marketing departments have caught on to the now positive associations with stem cells and mis-advertise their products with unsubstantiated and misinformed assertions. Despite the marketing jargon and faulty claims, some of these products that claim to contain 'stem cell conditioned media' or 'stem cell extract' do not have proven studies or data to support them. It seems unfair to me that a significant proportion of the skincare market comprises false advertisements, especially those that claim 'scientific breakthrough', whilst there are some honest, genuine, hardworking companies formulating and inventing new ingredients that have been proven to battle premature ageing skin.

#### Sourcing trustworthy products and treatments

Unfortunately, these reliable companies are hard to find for our patients and, often, their

scientifically-based products are not sold in major stores and retailers. So naturally, where does everyone turn to for answers? The internet. The sad thing about this approach is many fail to recognise the power of marketing companies that strategically buy high search rankings on Google. Thus, potentially leaving our patients with another underperforming skin care product. So, when looking to incorporate a new stem cell derived skincare line into your clinic, how can you decide what is worth trying?

#### Important factors to look out for:

- Look for ingredients that are scientifically proven to improve skin and prevent premature ageing. Pubmed.com is a free site that publishes numerous studies that have researched ingredients and products, which could help practitioners discover the efficacy of some ingredients.
- Research the company, paying close attention to its history and involvement in scientific research.
- Find out if it's available in other aesthetic practices or pharmacies and talk to those practitioners that stock it. They may be able to advise you of their patients' responses to the product and how successful it has been for them.
- Be aware of the words 'organic', 'natural', 'rare plants', or 'holistic.' Those words can often be simply jargon. Look instead for references to clinical studies that have enrolled plenty of impartial participants.

Finally, don't be afraid to talk to colleagues and ask them for their advice on stem cell skincare brands. Many will be well educated on what is effective, and unlike many cosmetic companies, will not have an underlying sales agenda.



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