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## EDITORIAL Wine, witches and blood

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The witch's scene in 'Macbeth' by William Shakespeare.

William Shakespeare, English playwright, poet, and actor (1564–1616) Fig. 1.

I do not know if you believe in witches, miracles, or saints but they have been the subject of writers for many millennia [1]. Although the evidence which condemned many so-called witches was tenuous, to say the least, many unfortunately succumbed to torture and a violent death Fig. 2. Miracles attributed to saints also are sometimes difficult to verify. Witches, at least in children's minds, are often associated with the iconic vision of the old crone, dressed in black riding on a broomstick although the interaction between witches (not on broomsticks) and humans in William Shakespeare's play is also well-known. The connection between witches, magic and so-called miracles is somewhat subjective. For our purposes, however, the names of saints to whom a miracle could be attributed, have been associated with various branches of medicine and in some cases to wine making!

In medicine St. Agatha's name is associated with breast cancer. She was Sicilian and although of noble blood rejected her worldly possessions and was executed for refusing to renounce her religious beliefs. She was tortured having her breasts removed before her death. Although there are many saints associated with branches of medicine (see below) it is difficult to associate any specific saint with haematology. The best I can do is to mention St. Philomena although I must confess, I did not come across her during my haematological career. She was a young girl of 14 years who was martyred because she refused to marry the emperor. Her remains and a vial, purported to be her blood, were uncovered and subsequently transferred to a church, the Sanctuary of S. Filomena in Mugnano del Cardinale, in Avellino (southern Italy) in 1805. Whatever about the details of her early life she is now looked upon by many as the patron saint of blood diseases.

I was unaware of the name of the patron saint of wine until recently. My wife brought to my notice an article by Frank McNally in the Irish Times [2] 'An Irishman's Diary' where he writes that November 11<sup>th</sup> is the feast day of St Martin who, he claims, is the patron saint of wine. I must say that in all my years of winedrinking, and there have been many, I was not aware of this connection. It is a nice story. Martin was of noble birth but, like St. Agatha, eschewed all worldly trappings for a life of poverty and devotion to God. Although born in Hungary he eventually became bishop of Tours in France. He started life as a Roman soldier but converted to Christianity as a youth. He is still very popular in France where Martin is a common name. He is the subject of numerous artistic motifs, the most famous being one by EL Greco depicting Martin dividing his cloak for a beggar in the depths of winter Fig. 3. To become a saint, you must be accredited with a miracle and Martin is purported to have raised a man from the dead. Legend has it that he was also closely associated with the pruning of vines. Apparently, he and his colleagues saw a donkey



**Fig. 1** Macbeth consulting the Vision of the Armed Head. Henry Fuseli (1741–1825) Oil on canvas painting. Public domain. From an original in the Folger Shakespeare Library Licensed under a Creative Commons Attribution-ShareAlike 4.0 International License (CC BY-SA 4.0).

merrily chewing grapes and, presumably, some of the vines. They were horrified until later in the season they observed that the same vines produced abundant quantities of excellent grapes. Although St Martin is associated with vine pruning, this practise was also carried out in Egypt and by the Romans. Of course, Pliny the Elder had something to contribute, as he had about almost everything, 'The earlier the vine is pruned, in suitable weather, the greater is the quantity of wood, while the later the pruning, the more abundant the fruit' [3]. Since then, vine pruning has become common practise among oenologists and has now become quite a sophisticated practise. According to Dr Richard Smart [4] writing in The Oxford Companion to Wine: 'Pruning of vines involves cutting off unwanted vegetative parts in the form of canes in winter. The aims of pruning are threefold: to increase the size of berries and bunches, contain the shape of the vine to make all vineyard operations easier, and regulation of the following years yield'. The exact timing and type of pruning carried out depends on the type of vine training employed in the vineyard and the Guyot method of vine training is probably the most common in Europe.

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Fig. 2 A trial and execution of 'witches' in Mora, Sweden in the 17<sup>th</sup> century. Public domain. Unknown artist. This work is in the public domain in its country of origin and other countries and areas where the copyright term is the author's life plus 100 years or fewer.

Although there are no witches or saints associated with Haemopoietic Cell Transplantation (HSCT) the idea of stem cells and their capacity for longevity seems to contain some magical qualities [5]. The term stem cells was coined by Boveri and Haecher in the 19<sup>th</sup> century, however Pappenheim, Maximov and Neuman contributed major insights to the theory of haemopoietic stem cells. In the 1960s Till and McCulloch are credited with

defining key properties of haemopoietic stem cells and their existence is proven daily by clinical HSCT [6].

We live in a world of uncertainties/miracles, which includes the interaction between the sugar inside grapes and the fungus on the skin to make wine and the long-term cure of some leukaemias with HSCT. Either way wine drinking is certainly a pleasurable experience and may even convey some health benefits.



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## AUTHOR CONTRIBUTIONS

Shaun McCann is the sole author and responsible for all the ideas and writing.

## **COMPETING INTERESTS**

The author declares no competing interests.



**Fig. 3 St Martin and the beggar by EL Greco (1541–1614).** Oil on canvas. National Gallery of Art, Washington D.C. USA. Public Domain.

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