



## Why should we be concerned about a “g”?

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Dear Sir,

In recent years there has been much debate regarding whether we should use the term “theranostics” or “theragnostics”. Both have a long history of use [1, 2] and it is generally understood that the both words mean a combination of treatments, being derived from the Greek words *therapia* and *diagnosis*, the latter itself being derived from the Greek word *gnosis* which means knowledge. In a recent review in the *EJNMMI*, Verburg et al. used the term “theranostics” in the title but acknowledged the term “theragnostics” [3].

Greek is one of the oldest continuously spoken Indo-European languages having been used for 34 centuries [4], and is the language of Hippocrates and Galen. The writings of Hippocrates date back to the fifth and fourth centuries BC. At that time Greek was not just a national language but was the universal language of scholarship, not only in Europe but also in North Africa and western Asia.

During the period of the Roman Empire Greek words may have been latinized, for example the words *stomachus* and *brachium* in *De Medicina* by Aulus Cornelius Celsus [5]. In modern medicine the Greek language continues to be mined to provide terms we use every day in our practice, sometimes to the confusion of non-medically trained Greeks. After all, patients with leukaemia do not have blood that is white. However, the use of Greek words has not always been as sympathetic to the original language as it should have been, often to our detriment as the essential meaning of the original words may have been lost.

As always when there is a dispute it is good to seek the help of an expert. Therefore, we turned to Prof. George Babiniotis who is Emeritus and Honorary Professor of Linguistics and former Rector (2000–2006) of the University of Athens. He

has compiled the definitive lexicon of modern Greek [6]. Following our correspondence concerning the “theranostics” versus “theragnostics” dispute these are his thoughts:

Theragnostics is the better term. In theranostics the second part of the word nostics refer more to the disease than diagnostics. Linguistically the better approach is a synergy of the two words therapo-gnostics because *thera* alone does not refer to therapy and could be confused with the Greek word for hunting.

Although we may feel that we do indeed hunt down the tumour, it would seem then that “theragnostics” is the better term with its emphasis on knowledge. Also it is important to understand that the key to the term “theragnostics” is “gnosis”, not “agnosis” that is derived from the Greek word *agnosis* which is a lack of knowledge, because nuclear medicine with its combination of molecular imaging and molecular radiotherapy does indeed offer knowledge-based precision medicine.

### Compliance with ethical standards

**Conflicts of interest** None.

**Ethical approval** This article does not describe any studies with human participants or animals performed by any of the authors.

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