MenaQ7® Vitamin K2 Again Shown to Inhibit Hardening of Arteries: New Study
Clinical single-arm trial with renal transplant recipients shows improved arterial stiffness

OSLO, NORWAY and METUCHEN, NJ (August 16th, 2017) – A new study\(^1\) of renal transplant recipients, a group shown to express subclinical vitamin K deficiency, examined whether K2 supplementation would correct this deficiency and thus improve arterial stiffness. The study has published in *Journal of the American Society of Hypertension*, and the vitamin K2 used in the study was MenaQ7® Vitamin K2 as MK-7 from NattoPharma.

This Lebanese study evaluated in the KING trial (a single-arm pilot study) to see if there is an association between vitamin K2 supplementation and the change in both subclinical vitamin K status and indices of arterial stiffness among 60 renal transplant recipients with stable graft function. The results showed that 8 weeks of MK-7 supplementation (360 mcg/day as MenaQ7®) was associated with significant improvement in arterial stiffness and 24-hour peripheral and central pressures. The mean reduction in cfPWV was 1.4 m/s, which was well beyond the reduction of 1 m/s recommended for a clinically relevant vascular effect.

“While our previous cardiovascular study in healthy postmenopausal women showed an improvement in arterial elasticity after 3 years of supplementation, the results collected in this trial are staggering, especially as the statistically significant effect was seen very quickly,” says Hogne Vik, chief medical officer of NattoPharma. “After just 8 weeks of MK-7 supplementation, low vitamin K status represented by dpucMGP level was significantly reduced by 55.1%. Moreover, supplementation was associated with a 14.2% reduction in mean cfPWV.

“One can assume that longer MK-7 supplementation may lead to even better results, and secure improvement in cardiovascular outcomes in renal transplant patients.”

According to the researchers, prior observational studies have shown the prevalence of subclinical vitamin K deficiency has been reported to be as high as 80% in the renal transplant population. Moreover, in kidney transplant recipients, Vitamin K insufficiency, expressed as a high circulating level of dp-ucMGP (dephosphorylated-uncarboxylated matrix Gla protein, or “inactive” MGP, a K-dependent protein), is associated independently with increased risk of mortality. However, any studies to date have not addressed whether vitamin K supplementation may lead to improved outcomes after kidney transplantation.

In addition, MK-7 supplementation improved vitamin K status, which was represented by the reduction in dp-ucMGP concentrations. A positive correlation was present between the reduction in arterial stiffness, a surrogate of early cardiovascular disease, and the circulating concentration of dp-ucMGP, a marker of subclinical vascular vitamin K deficiency and calcification.

The main conclusion was that, among renal transplant recipients with stable graft function, vitamin K2 supplementation was associated with improvement in subclinical K deficiency and arterial stiffness. According to the researchers, the findings from this trial support the hypothesis that subclinical vitamin K deficiency may be a modifiable cardiovascular risk factor and may improve with MK-7 supplementation.
“NattoPharma was excited to participate in this clinical trial,” adds Dr. Vik. “We have dedicated ourselves to cultivating an understanding of the benefits Vitamin K2 offers to human health, and in that work have recognized that vitamin K2 deficiency can have serious implications on arterial health. This study adds to the body of evidence confirming the cardiovascular support MenaQ7® Vitamin K2 as MK-7 provides, and continues to solidify the hope this important nutrient offers the global population.”

Reference:

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**About NattoPharma and MenaQ7®**

NattoPharma ASA, based in Norway, is the world’s leader in vitamin K2 research and development. NattoPharma is the exclusive international supplier of MenaQ7® Vitamin K2 as MK-7, the best documented, vitamin K2 as menaquinone-7 (MK-7) with guaranteed actives and stability, clinical substantiation, and international patents granted and pending. The company has a multi-year research and development program to substantiate and discover the health benefits of vitamin K2 for applications in the marketplace for functional food and dietary supplements. With a global presence, the company established its North American subsidiary, NattoPharma USA, Inc., in Metuchen, NJ, and NattoPharma R&D Ltd. in Cyprus. For more information, visit [www.nattopharma.com](http://www.nattopharma.com) or [www.menaq7.com](http://www.menaq7.com).

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