



Research Paper

## QZU® in migraine prophylaxis: an observational study.

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### I. Introduction

Kudzu (*Pueraria montana lobata*) is a wild climbing plant native to Asia and belonging to the Fabaceae family, which also includes beans, peas, lentils, peanuts, soybeans, licorice, and wisteria. Kudzu's purple flowers form clusters similar to wisteria flowers. It is a long-lived plant (100 years) and large in size (roots up to 100 m). Thanks to its characteristics, it is an excellent defense against soil erosion.

Its discovery and first uses date back almost 1,300 years in the Far East, until its introduction in the USA around 1800. It has long been widely used in Traditional Chinese Medicine for the treatment of migraines, high blood pressure, substance addiction (alcohol, tobacco), tinnitus, and menopause. Kudzu roots are rich in isoflavones from the flavonoid family, including daidzein, recognized as an anti-inflammatory and antimicrobial agent, and genistein. Kudzu is the only source of puerarin (the Latin name for kudzu is "pueraria").

Studies have shown that these isoflavones stimulate the brain's production of dopamine and act on neurotransmitters such as serotonin, GABA, and glutamate.

#### Kudzu Uses

One of the most interesting and studied properties of Kudzu is its ability to alleviate addictions to smoking, alcohol and other substances thanks to the active ingredients contained in its roots. (1,2) These have a high content of isoflavones (phytoestrogens) capable of providing numerous benefits in the case of menopause syndrome. (3) Kudzu has a dual action: on the estrogen receptors (ER alpha and beta) and serotonergic action. (4) Kudzu acts as a protector and repairer at the gastrointestinal level by regulating intestinal activities. An important future use is the treatment and prevention of osteoporosis. In fact, a study using in vitro cultures radiolabeled with <sup>14</sup>C-sucrose of Kudzu has demonstrated that the isoflavones contained (daidzein and puerarin) are able to reach bone tissue to exert effects that promote bone formation and prevent bone loss. (5,6)

#### Migraine and Kudzu

There is little scientific evidence regarding the efficacy of kudzu in the treatment of primary headaches. In 2009, an American study evaluated 11 patients suffering from episodic cluster headache treated with kudzu extract. The efficacy of the therapy presents a dose-response relationship, in terms of control of intensity, frequency and duration of individual cluster headache attacks. (7)

Another study included 30 patients suffering from migraine with and without aura treated with kudzu at a dosage of one capsule/day for 60 days and demonstrated excellent tolerability and a significant improvement in VAS and a reduction in attacks and migraine days, as well as a reduction in intensity and duration of migraine attacks. (8) A case report of migraine without aura treated with kudzu 2 capsules confirmed the results in terms of safety, efficacy and tolerability. (9) Another study (2019) confirms the results achieved in previous studies in a sample of 63 patients treated for 60 days with 1 capsule/day. (10)

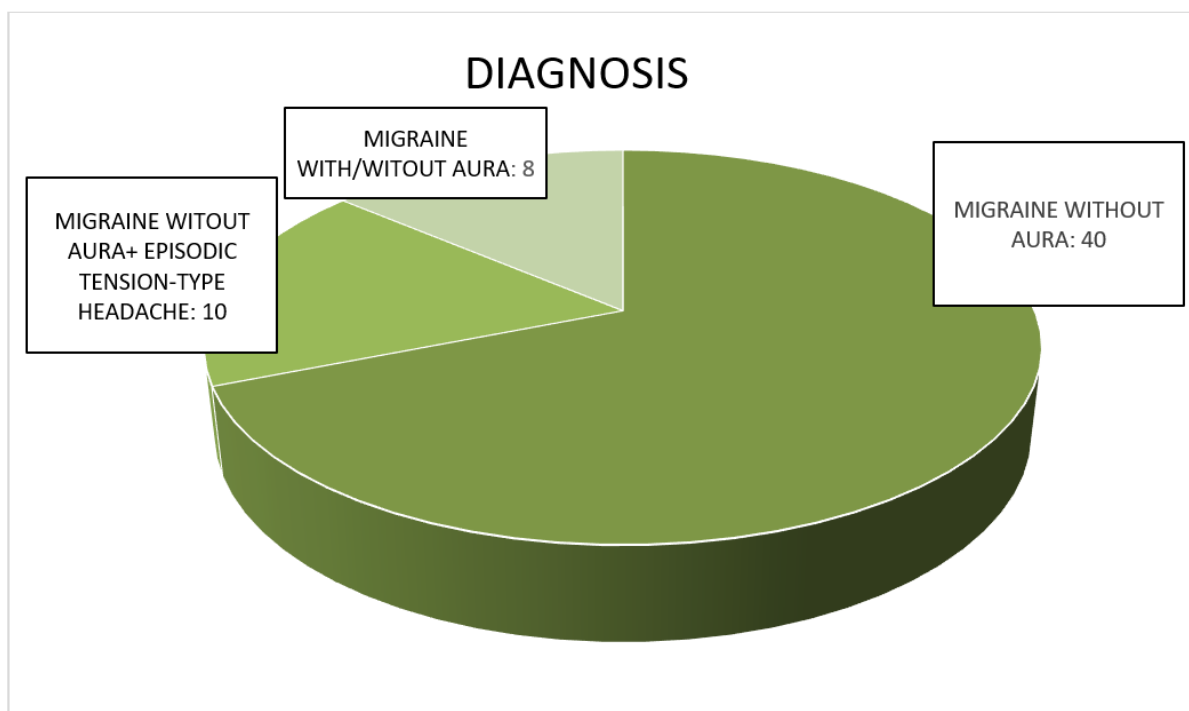
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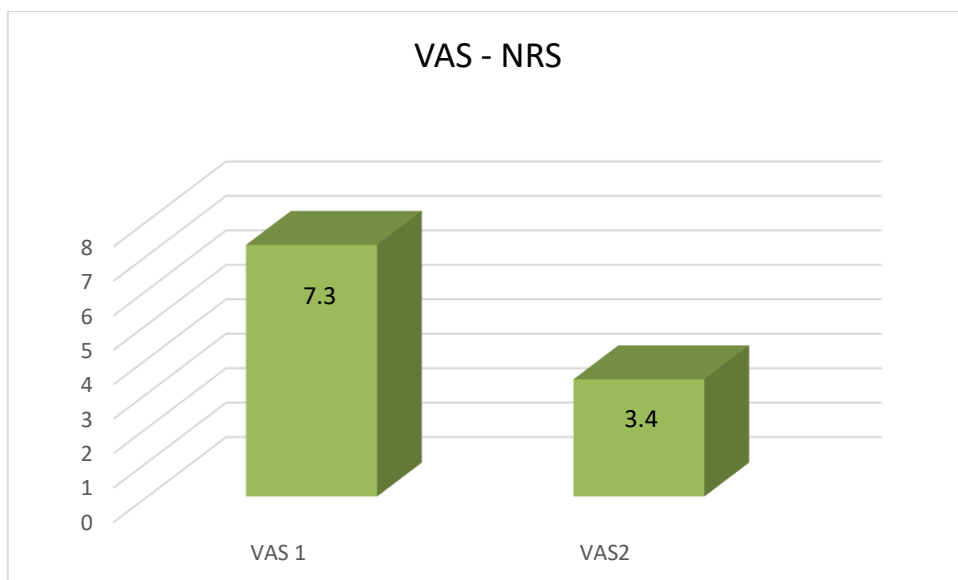
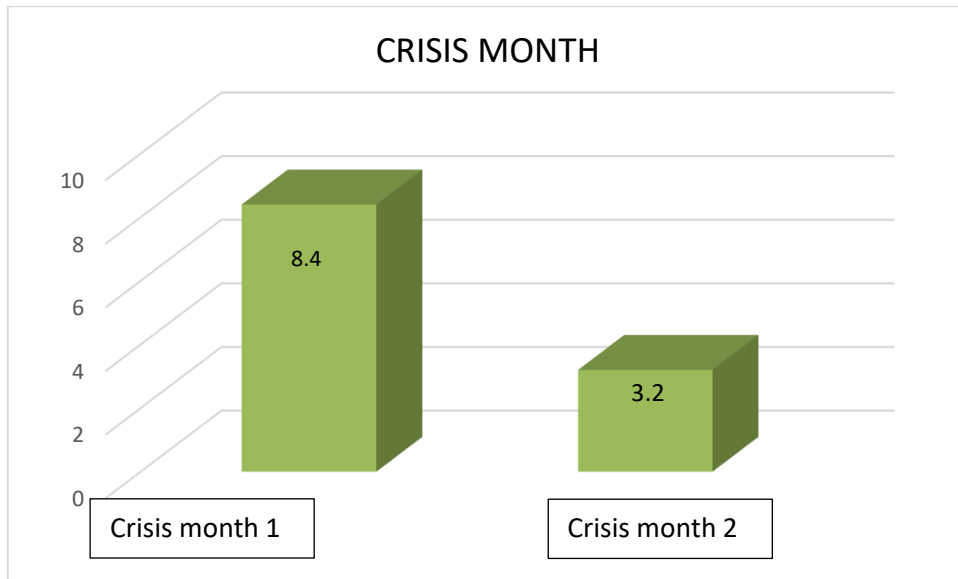
Migraine is a primary headache disorder characterized by moderate to severe pain and significantly impacts patients' social and work lives. In recent years, there has been growing interest in the use of nutraceuticals for migraine prevention, as there are no specific medications for this indication. Building on the scientific studies described above, which used kudzu at 1 capsule/day or 2 capsules/day, as in the case report, we undertook a new study using kudzu. The aim of the study is to demonstrate the efficacy of QZU®, at a dosage of 2 capsules/day, in the prophylaxis of episodic and chronic migraine without aura and with aura.

**II. Materials and methods**

Between January and June 2025, 58 patients with migraine with and without aura, both episodic and chronic, were treated with QZU® 2 capsules/day for 2 months, recruited from various neurological outpatient facilities and general medicine practices; all patients completed a diary and data collection form (ICHD-III criteria). Patients were assessed at baseline and after 2 months of treatment for the number of attacks, migraine days, and VAS (Visual Analogue Scale). Data on weight, efficacy, and tolerability of the product were collected.

Patient characteristics: 54 females and 4 males; mean age 38.2 (18-70); 40 patients with migraine without aura, 8 patients with migraine without aura and with aura and 10 patients with migraine without aura associated with episodic tension-type headache. At baseline in the total population the mean number of attacks/month was 8.4 (6.7-10.2), days/month of migraine 13.7 (5-21) and mean VAS 7.3 (6.8-8). In the 12 patients with chronic migraine (> 14 days/month of migraine): the mean number of attacks/month was 7.2 (5-10), days/month of migraine 17.4 (15-21) and mean VAS 8.1 (7-10).





### III. Results

QZU® was well tolerated: on a numeric scale of 1-10 the average score was 9.5 (8-10); patient compliance was excellent, no product-related side effects were reported and no weight gain occurred in patients. A clear improvement in patients' asthenia was noted. Regarding efficacy, at the end of treatment, in the total population all the parameters analyzed significantly improved: the average number of attacks/month was 3.2 (1-4), headache days/month 7.7 (2-14) and the average VAS 3.4 (2-5). In the group of patients with chronic migraine, the results were equally significant: the average number of attacks/month was 3.6 (1-4), migraine days/month 9 (5-14) and the average VAS 3.5 (2-5). 2 female patients with chronic migraine were found to be non-responders.

### IV. Discussion

To evaluate the effectiveness of a therapy, it's important to understand the substantial difference between scientific research and individual testimonials. That is, it's one thing to claim that a certain practice is useful because a clinical study has demonstrated its efficacy on a group of people, following strict methodological guidelines; it's another thing entirely to claim that the same complementary practice is beneficial based on hearsay or because it's written about online.

### V. Conclusion

Our study, which confirmed the preliminary data (11), clearly demonstrated the benefits, safety and good tolerability of QZU® in the prophylaxis of migraine without aura and with aura, episodic and chronic, confirming the data obtained in a previous study (10) and highlighting the positive data obtained with Kudzu® 2 capsules/day in patients with migraine.

### Bibliography:

- [1]. Sewell RA, Halpern JH, Harrison GPJr. Response to Cluster Headache to Kudzu. *Headache* 2009; 49: 98-105.
- [2]. Pucci E, Solinas F, Mostardini C, Loiero M, Soragna D, Niego R, Galante R. Efficacy of KUZIK® in the prophylaxis of migraine without aura: a retrospective observational study. *J Headache and Pain* 2017, 18 (Suppl 1):111 (Abstact book, 114-115).
- [3]. Lukas SE, Penetar DM, Su Z, Geaghan T, Maywalt M, Tracy M, Rodolico J, Palmer C, Ma Z, Lee DYM. An extract of the Chinese herbal root kudzu reduced alcohol drinking by heavy drinkers in a naturalistic setting. *Alcohol Clin Exp Res* 2005; 29(5):756-762.
- [4]. Penetar DM, Toto LH, Lee DYM, Lukas SE. A single dose of kudzu extract reduces alcohol consumption in a binge drinking paradigm. *Drug Alcohol Depend* 2015; 1(153): 194-200.
- [5]. Harjirahimkhan A, Dietz BM, Bolton JL. Botanical modulation of menopausal symptoms. Mechanisms of action? *Planta Med* 2013;79(7): 538-553.
- [6]. Lukaczer D, Darland G, Tripp M, Liska D, Lerman RH, Schictz B, Bland JS. Clinical effects of a proprietary combination isoflavone nutritional supplement in menopausal women: a pilot study. *Altern Ther Health Med* 2015; 11:60-65.
- [7]. Huh JE, Yang HR, Park DS, Choi DY, Baek YH, Cho EM, Cho YJ, Kang-II K, Kim DY, Lee JD. Puerariae radix promotes differentiation and mineralization in human osteoblastic-like SaOS-2 cells. *J Ethnopharmacol* 2006; 104(3): 345-350.
- [8]. Mun JG, Grannan MD, Lachck PJ, Rogers RB, Yousef GG, Grace MH, Janle EM, Wu QL, Simon JE, Weaver CM, Lila MA. Tracking deposition of a 14C-radiolabeled kudzu hairy root-derived isoflavone-rich fraction into bone. *Experimental Biology and Medicine* 2010; 235: 1224-1235.
- [9]. Pucci E, Pucci L, Galante R. Treatment with Kuzik two tablet in migraine without aura: case-report. *Neurol Sciences* 2019; Vol 40, Suppl October 2019 (Abstret book, S364-365).
- [10]. Tullo V, Curone M, Colombo B, Allais G, Sinigaglia S, Benedetto C, Zarccone D, Saracco MG, Aguggia M, Bussone G. Response of migraine without aura to Kudzu. *Neurol Sci* 2019, 40 (Suppl.1): 203-205.
- [11]. Pucci E, Pucci L, Vercesi A. QZU ® (Kudzu e.s.: 200 mg of which Isoflavones: 80 mg and Puerarin: 60 mg; ComplexZyme vegan ® : 40 mg) in the prophylaxys of migraine without aura: a retrospective observational study. *Confinia Cephalalgia*, Vol. 35 No. S1 (2025): 39° Conference of the Italian Society for the Study of Headaches. (SISC). <https://doi.org/10.4081/cc.2025.15916>