This obscure herb works for the common cold, *J Fam Pract* 2008; 57:157–161	
Potential PURL Review Form: Randomized controlled trial	
SECTION 1: IDENTIFYING INFORMATION	
1.1 Citation	Lizogub VG, Riley DS, Heger M. Efficacy of a *Pelargonium sidoides* preparation in patients with the common cold: A randomized, double blind, placebo-controlled clinical trial. *Explore (NY)* 2007; 3:573–584.
1.2 PubMed ID	18005909
1.3 Nominated by	Bernard Ewigman, MD
1.4 Date nominated	11/28/07
1.5 Identified through	Dynamed
1.6 Decision	Potential PURL
1.7 PURLS Editor	Bernard Ewigman, MD
1.7 Nomination decision date	11/28/07
1.8 Initial status	
1.9 Comments	An RCT showing benefit for treatment of the common cold
1.10 Assigned reviewer	Debbie Stulberg
1.11 Reviewer affiliation	University of Chicago
1.12 Date review due	12/6/07
SECTION 2: DETAILED STUDY DESCRIPTION	
2.1 Number of patients starting each arm of the study?	52 in the intervention group (*Pelargonioum sidoides*), 51 in the placebo group
2.2 Main characteristics of study patients (inclusions, exclusions, demographics, settings, etc)?	*Inclusion:* Adults 18 to 55 years of age, having cold symptoms for the previous 24 to 48 hours. Presence of either 2 major cold symptoms (nasal discharge, sore throat) and at least 1 minor cold symptom (nasal congestion, sneezing, scratchy throat, hoarseness, cough, headache, muscle aches, or fever), or presence of 1 major and at least 3 minor symptoms. *Exclusion*: Presence of any other acute ear, nose, throat, and respiratory tract disease other than the common cold; positive rapid strep test; recurrent tonsillitis, sinusitis, or otitis, with ≥6 episodes during the past 12 months, or any chronic ear, nose, throat, and respiratory tract disease;

	treatment with antibiotics, glucocorticosteroids, or antihistamines during the 4 weeks prior to enrollment, or treatment with cold medications that might impair the trial results (eg, decongestants, local anesthetics, cough, or pain relief medications or any other treatment for the common cold during the seven days prior to enrollment; known hypersensitivity to the investigational product; previous or existing severe cardiovascular disease or unstable diabetes; severe renal or hepatic dysfunction at any time during the past 12 months; evidence of any malignant disease during the past 5 years; pregnant or breastfeeding; participation in another clinical trial concurrently or in the past 3 months.
2.3 Intervention(s) being investigated?	A liquid herbal drug preparation from the roots of *Pelargonium sidoides* (Willmar Schwabe Pharmaceuticals, Germany)
2.4 Comparison treatment(s), placebo, usual care, and/or no treatment?	Placebo
2.5 Length of follow up? (Note specified endpoints, eg, death, cure, etc)	Primary endpoint is symptom scale at day 5 of treatment
2.6 What outcome measures are used? (List all measures used to assess effectiveness)	*Primary outcome*: Sum of symptom intensity difference (SSID) of the cold intensity score (CIS) from day 1 to day 5. CIS = validated scale, consists of 10 symptoms, each rated 0 to 4, so the maximum score is 40. *Secondary outcomes*: • clinical cure = complete resolution of all (or all-but-one) cold symptoms • clinical response = reduction of total CIS below 7 points or reduction of CIS by at least 7 points by day 5 • improvement = any decrease in symptoms intensity from day 1 to 5 (other than remission) • ability to work • ability to return to usual activities (0%–100%) • general well-being, assessed using the Psychological General Well-Being Index • treatment outcome, assessed by both investigator and patient by using the integrative medicine outcomes scale (a 5-point scale from complete recovery to deterioration) • satisfaction with treatment, assessed using the integrative medicine patient satisfaction scale (a 5-point scale, from very satisfied to very dissatisfied).
2.7 What is the effect of the intervention(s)? (Include absolute risk, relative risk, NNT, CI, *P* values, etc)	*Primary outcome* Mean SSID improved by 14.6 ± 5.3 points in the intervention group vs 7.6 ± 7.5 points in the placebo group (*P*<.0001) Mean total CIS decreased by 10.4 ± 3.0 points in the intervention group vs 5.6+/-4.3 points in the placebo group *Secondary outcomes* • On day 10, rate of clinical cure was significantly higher in intervention than placebo group (63.5% vs 11.8% for CIS=0, 78.8% vs 31.4% for CIS ≤1 symptom) (*P*<.0001 for both)

	• Rate of responders higher in intervention than placebo group. On day 5, there was a statistically significantly (*P*<.0001) higher number of patients with CIS <7 (42.3% vs 3.9%) and reduction of CIS by 7 or more points (94.2% vs 43.1%) • Mean decrease in all major and minor individual symptoms from day 1 to 5 was higher in the intervention group than in placebo • Mean duration of inability to work was significantly lower in the intervention than in the placebo group (6.9 ± 1.8 days vs 8.2 ± 2.1 days, *P*=.0003) • Duration of activity limitation (days with <100% of usual activity level) significantly shorter in intervention vs placebo group (7.1 ± 1.5 vs 8.8 ± 1.3 days, *P*<.0001) • General well-being improved significantly more in intervention vs placebo group (94.2% improved vs 68.6%, *P*<.0008) • Rate of complete recovery or major improvement (on integrative medicine outcomes scale) on day 5 significantly better in intervention group: 63.4% vs 3.9% (*P*<.0001 by physician assessment, 61.5% vs 3.9% *P*<.0001 assessed by patient) • Significantly higher patient satisfaction in the intervention vs placebo group: 86.5% very satisfied or satisfied vs 41.2% (*P*<.0001) and only 3.8% dissatisfied or very dissatisfied vs 15.7% in placebo (*P*<.0001) **Adverse events** 3.8% (2 of 52) in intervention, 2.0% (1 of 51) in placebo. None serious. Tolerability assessed by patients on day 5 of treatment: significantly better for intervention vs placebo (94.2% good or very good tolerability vs 82.4% in placebo). On day 10, 100% of patients in the intervention group assessed tolerability as good or very good.
SECTION 3: INTERNAL VALIDITY	
3.1 Study addresses an appropriate and clearly focused question	Well addressed
3.2 Random allocation to comparison groups	Well addressed
3.3 Concealed allocation to comparison groups	Well addressed
3.4 Subjects and investigators kept “blind” to comparison group allocation	Well addressed
3.5 Comparison groups are similar at the start of the trial	Well addressed
3.6 Were there any differences between the groups/arms of the study	Well addressed

other than the intervention under investigation? If yes, please indicate whether the differences are a potential source of bias	
3.7 Were all relevant outcomes measured in a standardized, valid, and reliable way?	Well addressed
3.8 Are patient-oriented outcomes included? If yes, what are they?	Yes
3.9 What percent dropped out, and were lost to follow-up? Could this bias the results? How?	1 withdrew in the treatment group, 1 in the placebo group
3.10 Was there an intention-to-treat analysis? If not, could this bias the results? How?	Yes
3.11 If a multisite study, are results comparable for all sites?	Setting: 8 outpatient centers in Ukraine. No site comparisons reported
3.12 Is the funding for the trial a potential source of bias? If yes, what measures were taken to insure scientific integrity?	Funding source is not given
SECTION 4: EXTERNAL VALIDITY	
4.1 To which patients might the findings apply? (Include patients in the study and other patients to whom the findings may be generalized)	All patients in the study are generally healthy Caucasian adults. They are in a general medical population in Ukraine
4.2 In what care settings might the findings apply, or not apply?	General medical clinics
4.3 To which clinicians or policy makers might the findings be relevant?	Same
SECTION 5: REVIEW OF SECONDARY LITERATURE	
5.1 DynaMed excerpts	Liquid herbal solution containing *Pelargonium sidoides* (EPs) hastens resolution of common cold symptoms (level 1 [likely reliable] evidence)
5.2 DynaMed citation/access date	Dynamed authors. Available at:

	http://dynamed102.ebscohost.com/Detail.aspx?style=1&docid=/dynamed/47a628596b9411cb852562c7007ac5b0 accessed Dec 4 2007
5.3 UpToDate excerpts	No mention of this herbal med either by searching on its name or in the document on The Common Cold in Adults: Prevention and Treatment
5.4 UpToDate citation/access date	UpToDate. Available at: http://www.uptodateonline.com/utd/content/topic.do?topicKey=pc_id/5093&selectedTitle=1~150&source=search_result Accessed Dec 4, 2007
5.5 PEPID PCP excerpts	No mention of this herbal medicine either by searching on its name or in the document on The Common Cold: treatment
5.6 PEPID citation/access data	
5.7 Other excerpts (USPSTF; other guidelines; etc)	
5.8 Citations for other excerpts	
SECTION 6: CONCLUSIONS	
6.1 How well does the study minimize sources of internal bias and maximize internal validity? Give one number on a scale of 1 to 7 (1=extremely well; 4=neutral; 7=extremely poorly)	**1**
6.2 If 6.1 was coded as 4 or below, please describe the potential bias and how it could affect the study results. Specifically, what is the likely direction in which potential sources of internal bias might affect the results?	
6.3 Are the results of this study relevant to the health care needs of patients cared for by "full scope" family physicians, general internists, general pediatricians, or general ob/gyns? Are they applicable without significant change in programs or policies such as the organization or financing of practice? Give one number of a scale of 1 to 7 (1=absolutely relevant; 4=neutral; 7=not at all relevant)	**1**
6.4 Please explain your response to	

item 6.3.	
6.5 What is the main recommendation for change in practice, if any? Include a description of the change in practice, the indications, and the target population	After reading this, I would recommend this herbal treatment for the acute cold in healthy adults. This appears to be available in the US (found on shopzilla.com) under the brand name Umcka ColdCare made by Nature's Way. We cannot know how this preparation compares to the efficacious preparation studied here.
SECTION 7: EDITORIAL DECISIONS	
7.1 FPIN PURLs editorial decision (select one)	Pending PURL—Forward to JFP Editor for interest in JFP publication
7.2 FPIN PURLS Editor	Bernard Ewigman, MD
7.3 Date of decision	12/6/2007
7.4 Brief summary of decision	We think this is a practice changer. This is a very well-done RCT, using a double-blind, placebo-controlled design with well-validated and clinically meaningful outcomes measures. In a Ukrainian adult population attending general medicine clinics, it showed that the herbal preparation (*Pelargonioum sidoides*) provided benefit compared with placebo as follows: ▪ Mean total "Cold Intensity Score" (maximum score = 40) decreased by 10.4 ± 3.0 points in the intervention group vs 5.6 ± 4.3 points in the placebo group ▪ Rate of complete recovery or major improvement (on integrative medicine outcomes scale) on day 5 significantly better in EPs group: 63.4% vs 3.9%, *P*<.0001 by physician assessment, 61.5% vs. 3.9% *P*<.0001 assessed by patient ▪ Significantly higher patient satisfaction in the intervention vs placebo group: 86.5% very satisfied or satisfied vs 41.2% (*P*<.0001) and only 3.8% dissatisfied or very dissatisfied vs 15.7% in placebo (*P*<.0001) ▪ Tolerability of intervention was rated better than the tolerability of the placebo For a practice change: ▪ Only DynaMed mentions this herbal treatment and does so only on the basis of this study ▪ We found no other reference or recommendation, so we suspect that physicians are not currently recommending this for patients ▪ The outcomes are impressive and desirable ▪ The adverse effects and tolerability are excellent ▪ Prior RCTs have shown that the intervention is effective for upper respiratory tract infections

	Against a practice change ▪ Not sure if this is available yet in the US, though we did find other brands of the same herbal preparation ▪ Consistency of the ingredients is always an issue with herbal preparations *Bottom line:* This is the most effective treatment we have seen for the common cold. Most "alternative" treatments for the common cold have shown inconsistent or unimpressive results in RCTs. We think it is a reasonable thing to suggest for our patients, though one would need to be organized in advance to order it and have it available. The practice change would be to advise your patients to order some and have it on hand.