

PATIENT-DRIVEN SCIG ADMINISTRATION: Potential for Better Health Outcomes Through Weekly Delivery

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Introduction:

Weekly SCIG offers a powerful set of tools to the clinician interested in patient-centered outcomes¹. In a 2012 European Commission study on Patient Involvement, the need for choice was a key finding². The efficacy of immunoglobulin therapy³ is well-established for treating Primary Immunodeficiency. Despite preference for fewer or no needles⁴, currently patients must use needles to deliver Ig products. The similar efficacy of IVIg and SCIG⁵ suggests a natural choice, yet studies show that quality of life is often better with SCIG^{6,7,8}.

With the ability to adjust delivery to suit patient lifestyle, SCIG provides an opportunity to empower the patient with decisions regarding their therapy toward better patient outcomes. This results in improved quality of life for the patient⁹. Economic benefits for the payer include reduced waste, clinician time-savings, and the potential to reduce hospital admissions through increased medication adherence¹³.

Objective:

To outline several common examples of patient choice in optimizing an SCIG therapy regimen, when switching from 3 times per week SCIG to 1 time per week.

Methods:

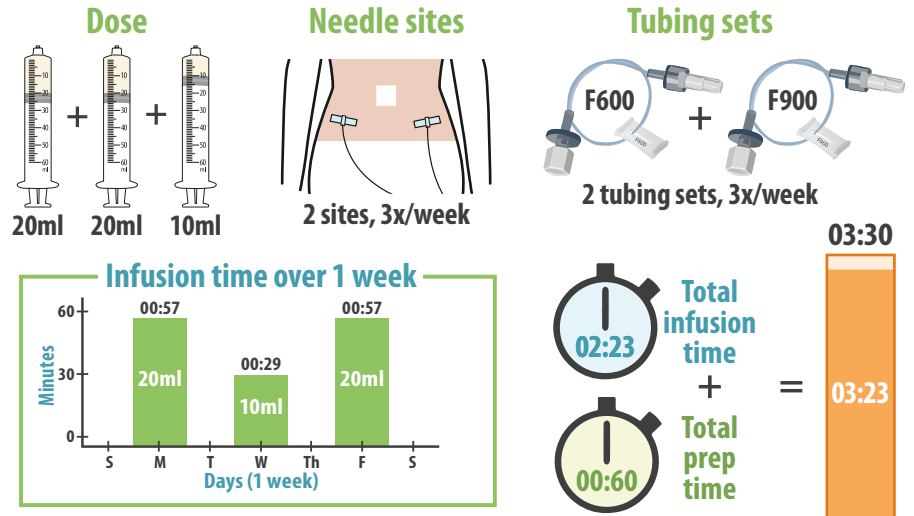
A theoretical 60kg 185cm patient on 10g 20% Ig 3X/week (4g, 2g, 4g) into two needle sites over 1h, was chosen as a baseline reference. Five scenarios for infusion were then modeled using a commercially-available excel-based tool¹⁴.

Conclusion:

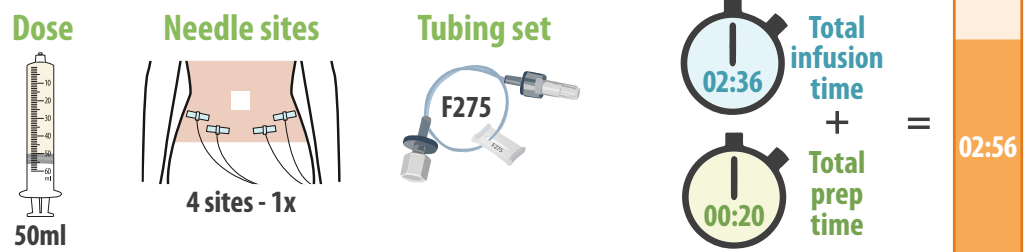
The five challenges and identified solutions were integrated into a reference table. Patient choice and empowerment are key to satisfaction and compliance^{2,10,11}. By using a short checklist and excel-based calculator, these examples provide an initial 'toolkit' of adjustments a clinician can make to increase patient compliance. These options work to engage the patient's needs and desires to adjust the treatment plan, resulting in higher patient satisfaction^{4,12}.

Reference Table: Scenarios toward faster infusions or fewer needles (as tolerated).

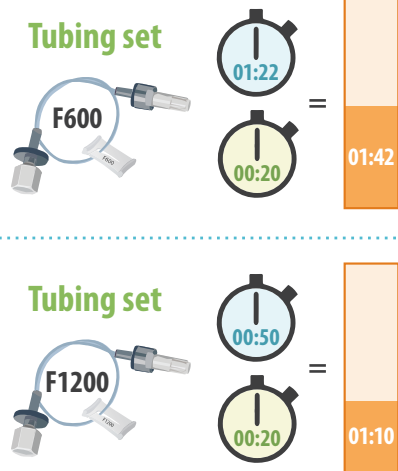
Baseline: 3x/week infusions



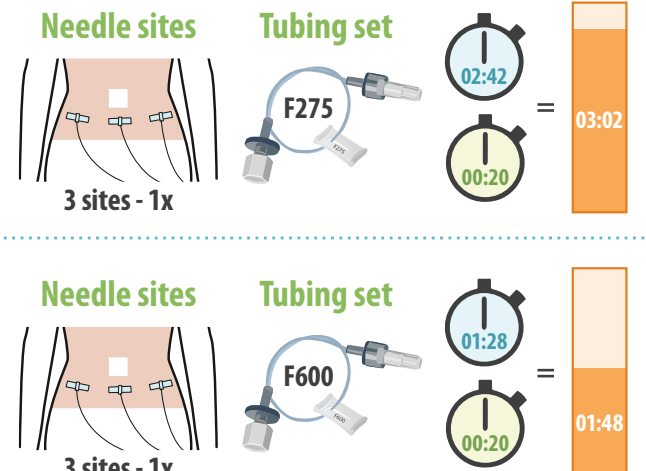
Changing to weekly infusions:



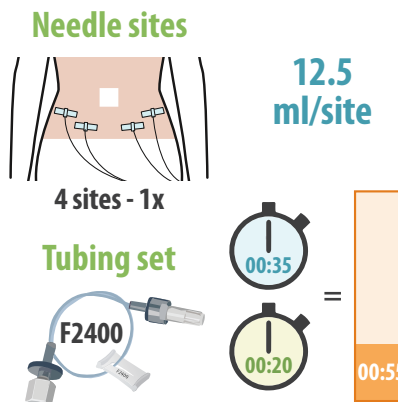
Moving toward more speed:



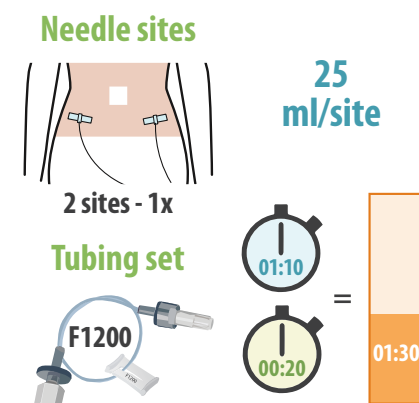
Moving toward fewer needles:



The goal of fastest rate:



The goal of fewest needles, and least number of sites:



Note that 4 needles/week is still less than the 6/week shown in the baseline example.

The demands of increased volume at the site may require careful assessment of needle length and placement technique. Not all patients can reach the limits of the package insert.

Commercially-available excel-based tool to model infusions¹⁴

Syringe Infusion System

Be sure you have read and understand your drug's package insert before using this calculator. For healthcare professional use only.

Patient Name: <Enter Name>

IgG Flow Rate Tubing Calculator

1. Select desired drug: <Dropdown>
 2. Enter dose in milliliters: <Enter Dose>
 3. Select desired needle set: <Dropdown>
 4. Select desired tubing set: <Dropdown>

Time of delivery: 1:20 HH:MM
 Time of flow rate: 37.22 total ml/hr
 Flow rate per site: 18.61 ml/hr/site
 Total volume per site: 25.00 ml/site

Support Studies:

- <http://www.nejm.org/doi/full/10.1056/NEJMp1207437>
- http://ec.europa.eu/public_opinion/archives/quali/ql_5937_patient_en.pdf
- <http://www.ncbi.nlm.nih.gov/pubmed/6206756>
- <http://www.dovepress.com/improving-current-immunoglobulin-therapy-for-patients-with-primary-imm-peer-reviewed-article-PPA>
- <http://link.springer.com/article/10.1023/A:1006678312925>
- <http://www.ncbi.nlm.nih.gov/pubmed/15480339>
- <https://bmt.confex.com/tandem/2013/webprogram/Paper2673.html>
- <http://www.ncbi.nlm.nih.gov/pubmed/22730009>
- <http://www.medscape.com/viewarticle/735613>
- <http://www.ncbi.nlm.nih.gov/pubmed/9201010>
- <http://www.biomedcentral.com/1472-6963/12/157#B5>
- http://www.terrymontague.com/e/pdf/concordance_compliance.pdf
- <http://www.psqh.com/september-october-2012/1411-home-infusion-therapy-safety-efficacy-and-cost-savings>
- <http://freedom60calculator.com/>

Disclosure:

Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation:

- Brad Sealfon: Patient Programs/Marketing Manager, RMS Medical Products
- Andy Sealfon: CEO, RMS Medical Products
- Chaterina Soderman: Director of European Sales, RMS Medical Products

This poster was funded by RMS Medical Products, a dba of Repro-Med Systems, Inc.

