

Tradename: AC Party Face Pom

Code: 20447

CAS #: 7732-18-5 & 84961-57-9 & 8028-48-6

Test Request Form #: 11047

Lot #: 9396380

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Principal Investigator: *Kayla Patterson*

Test Performed:

In vivo VISIA Analysis: Pores

Introduction

Pores are small holes that are located at the top of hair follicles on the body. Pores release sebum that naturally moisturizes skin. However, pores vary in size and can often appear enlarged which is a result of aging, sun damage, and clogged pores. Further clogged pores lead to undesirable skin blemishes such as discoloration and acne. Although completely eliminating pores from the skin is physiologically not a viable option, reducing the size of pores leads to a more youthful and healthy skin appearance by minimizing the opportunity for pores to become clogged.

Accordingly, an *in vivo* study was conducted over a period of six weeks to evaluate the ability of 2.0% **AC Party Face Pom** to reduce the appearance of pores on the face.

Study Principle

Participants applied specific products to designated halves of their face twice a day for four weeks. Measurements were collected once a week during the four-week use period and for two weeks after application ceased for a total of six weeks. Photographs of participant faces were obtained using the VISIA Complexion Analysis System and analyzed for pores.

Materials

- A. **Equipment:** VISIA Complexion Analysis System (Canfield Scientific., Fairfield, NJ, USA)
- B. **Base Lotion:** Simple® Hydrating Light Moisturizer; Simple® Cleansing Facial Wipes
- C. **Software:** Excel Analysis ToolPak (Microsoft)

Methods

10 volunteers between the ages of 23 and 69, who were known to be free of any skin pathologies with Fitzpatrick skin types I to IV, participated in this study (Table 1).

Table 1. The Fitzpatrick Classification of Skin Types Chart¹

Fitzpatrick Skin Type Descriptions*	
Skin Type	Description
I	Always burns, never tans
II	Burns easily, tans minimally
III	Burns moderately, tans to light brown
IV	Burns minimally, tans to moderate brown
V	Rarely burns, tans to dark
VI	Never burns, least sensitive to changes
*Adapted from The Surgeon General's Call to Action to Prevent Skin Cancer	

Each half of a participant's face was randomly assigned to a specific condition and treatment (Table 2). The Base Lotion utilized in this study was Simple® Hydrating Light Moisturizer. Following Baseline measurements, participants were provided both conditions and were instructed to apply 0.2 g of product to the specified half of their face twice daily for a four-week period. Participants were instructed to continue their usual skin care routine and to apply the lotion once their everyday skin care routine is finished. Baseline measurements were taken prior to starting the lotion regimen. Measurements were collected once a week during the four-week use period and for two weeks after application ceased for a total of six weeks. Participants were instructed not to wear makeup or SPF products for the measurement sessions.

Table 2. Descriptions of the Conditions and Treatments for each Skin Test Site

Skin Test Site	Condition	Treatment / Test Article Application Description
1	Base Lotion Control	Base Lotion
2	2.0% AC Party Face Pom	2.0% AC Party Face Pom in Base Lotion

Photographic assessments were performed using the VISIA Complexion Analysis System (Canfield Scientific., Fairfield, NJ, USA). The VISIA System ensured consistent positioning of each participant's head and each participant cleaned their face with a gentle facial wipe (Simple® Cleansing Facial Wipes) before images were obtained. The photographic images were captured with standard, cross-polarized, parallel polarized, and ultraviolet light.

Images were analyzed for Pore Feature Count, which indicates the number of discrete instances of pores within the analyzed region. The VISIA software counts a pore based on a size threshold. Lower pore counts indicate pores did not reach the size threshold and therefore suggest a more youthful appearance. To further demonstrate the impact of reducing pore counts on skin appearance, the TruSkin Age™ for each condition was included. TruSkin Age™ is a calculated number performed by VISIA to represent the participant's age of their skin. TruSkin Age™ is calculated by comparing the percentile scores for pores to others of the same age group, skin type, and gender.

The data is displayed as averages and t-test analyses were performed with statistical significance accepted at $p \leq 0.05$. Percent change is expressed relative to Baseline values and calculated by the following equation:

$$\text{Percent Change (\%)} = \frac{\text{Pore Count}_{\text{Week of Application}} - \text{Pore Count}_{\text{Baseline}}}{\text{Pore Count}_{\text{Baseline}}} \times 100$$

Results

The data obtained from this study met criteria for a valid assay. Application of 2.0% **AC Party Face Pom** twice a day for four weeks demonstrated pore reduction throughout the four-week treatment period and two-week regression period.

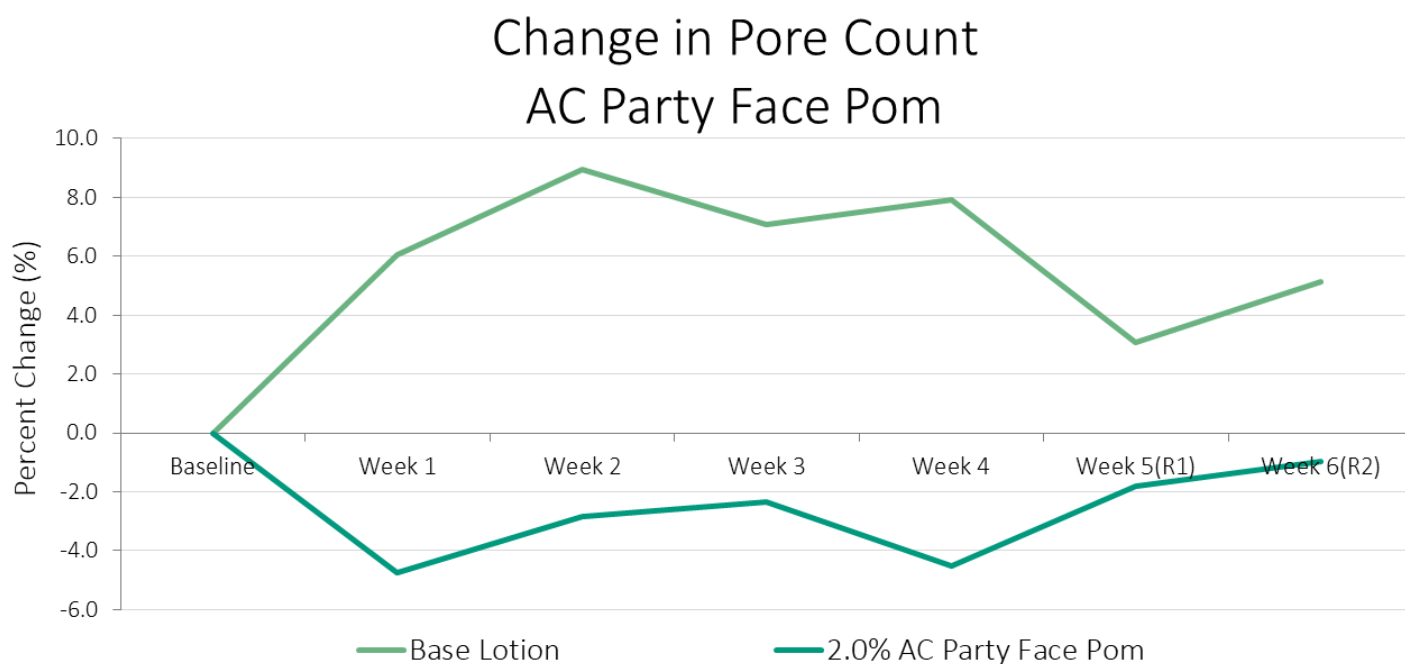


Figure 1. Average Change in Pore Count from Baseline. R1 and R2 indicate regression weeks with no application.

Table 3. P-values from t-test Analyses of Change in Pore Count from Baseline to After Four Weeks of Application and After Two Weeks of Regression with No Application

	Baseline vs After Four Weeks of Application	Baseline vs After Two Weeks of Regression with No Application
Base Lotion	0.447	0.588
2.0% AC Party Face Pom	0.047	0.362

Table 4. T-test Analyses of Change in Pore Count between Base Lotion and 2.0% **AC Party Face Pom** throughout the Study Duration

	After Four Weeks of Application	After Two Weeks of Regression with No Application
P-value	0.039	0.477

Change in VISIA TruSkin Age™ After Four Weeks AC Party Face Pom

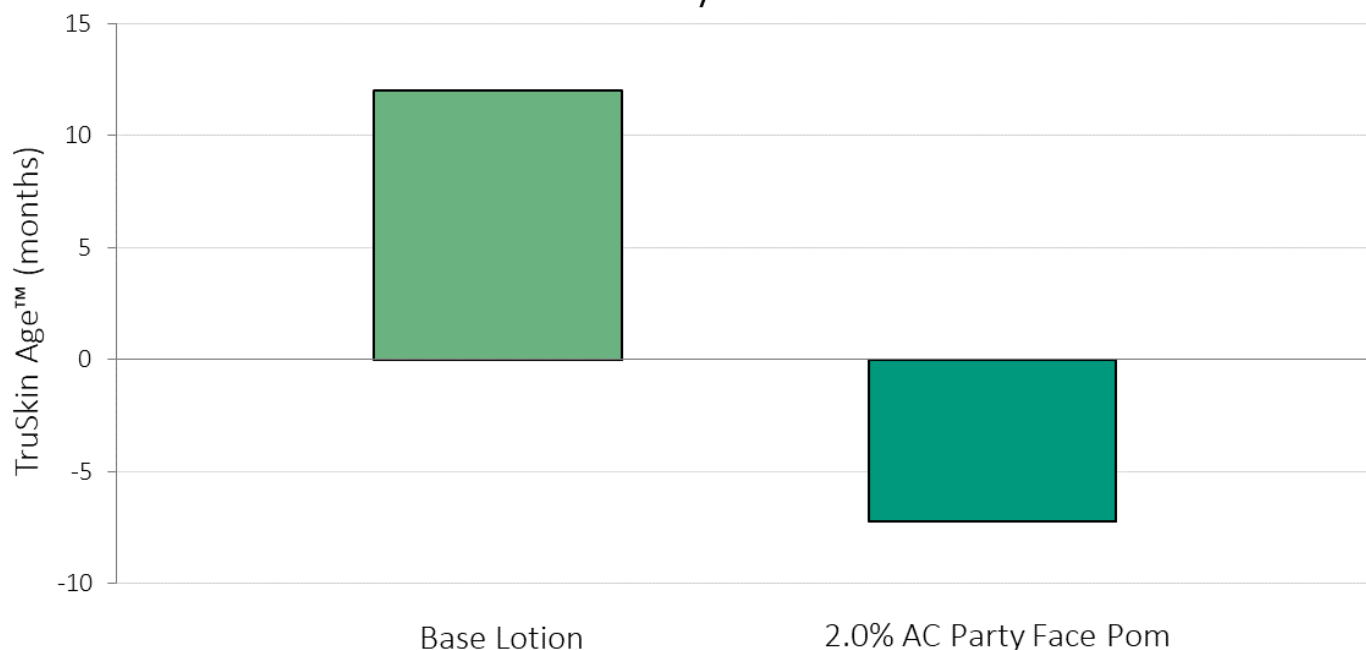


Figure 2. Average Change in VISIA TruSkin Age™ in Participants After Four Weeks of Application

Table 5. T-test Analyses of Change in VISIA TruSkin Age™ in Participants After Four Weeks of Application

	Base Lotion vs 2.0% AC Party Face Pom
P-value	0.049

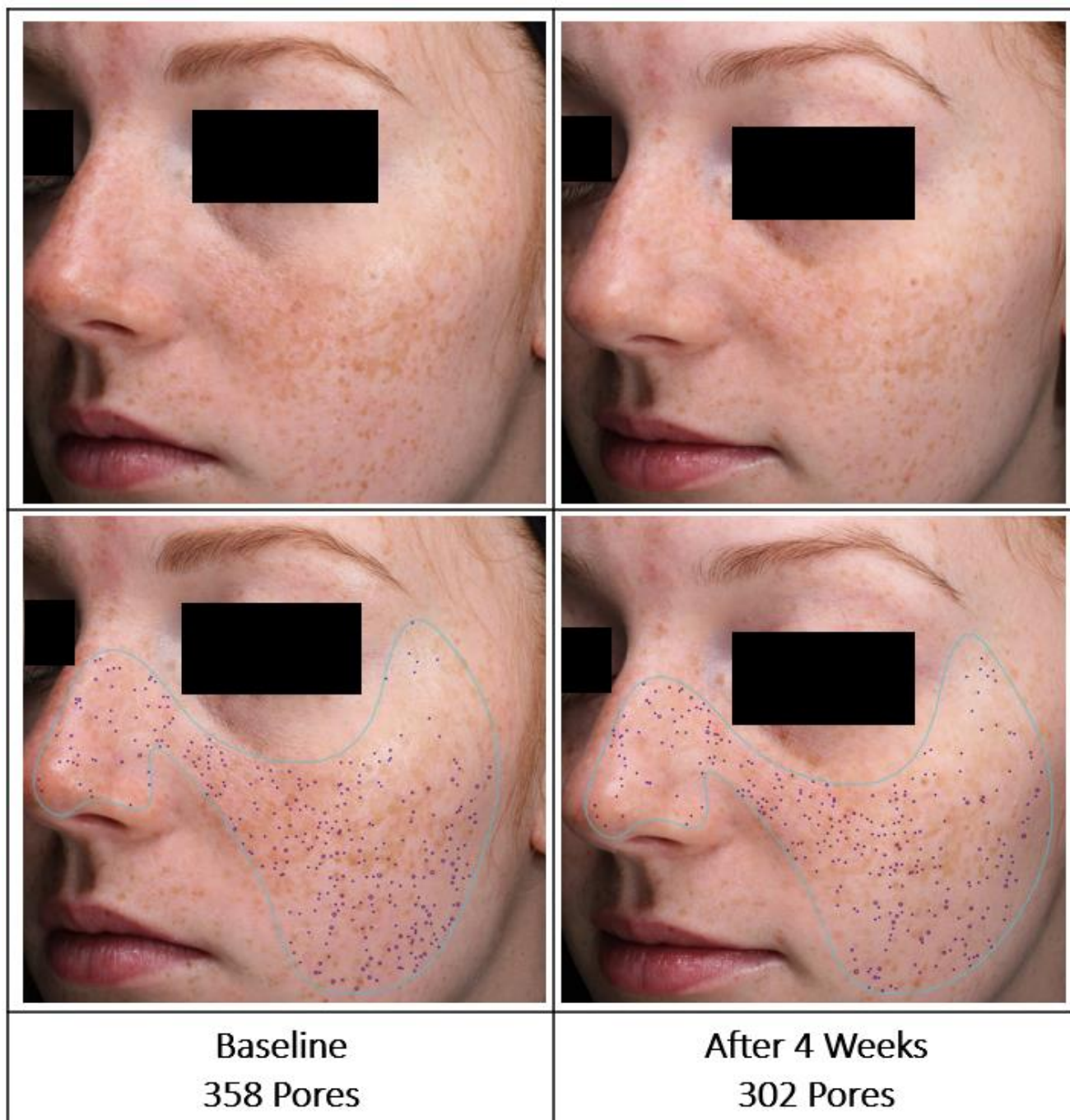


Figure 3. Images of Participant Treated with 2.0% AC Party Face Pom. Natural photos (top) and VISIA Image Enhancement (bottom) Before and After Four weeks.

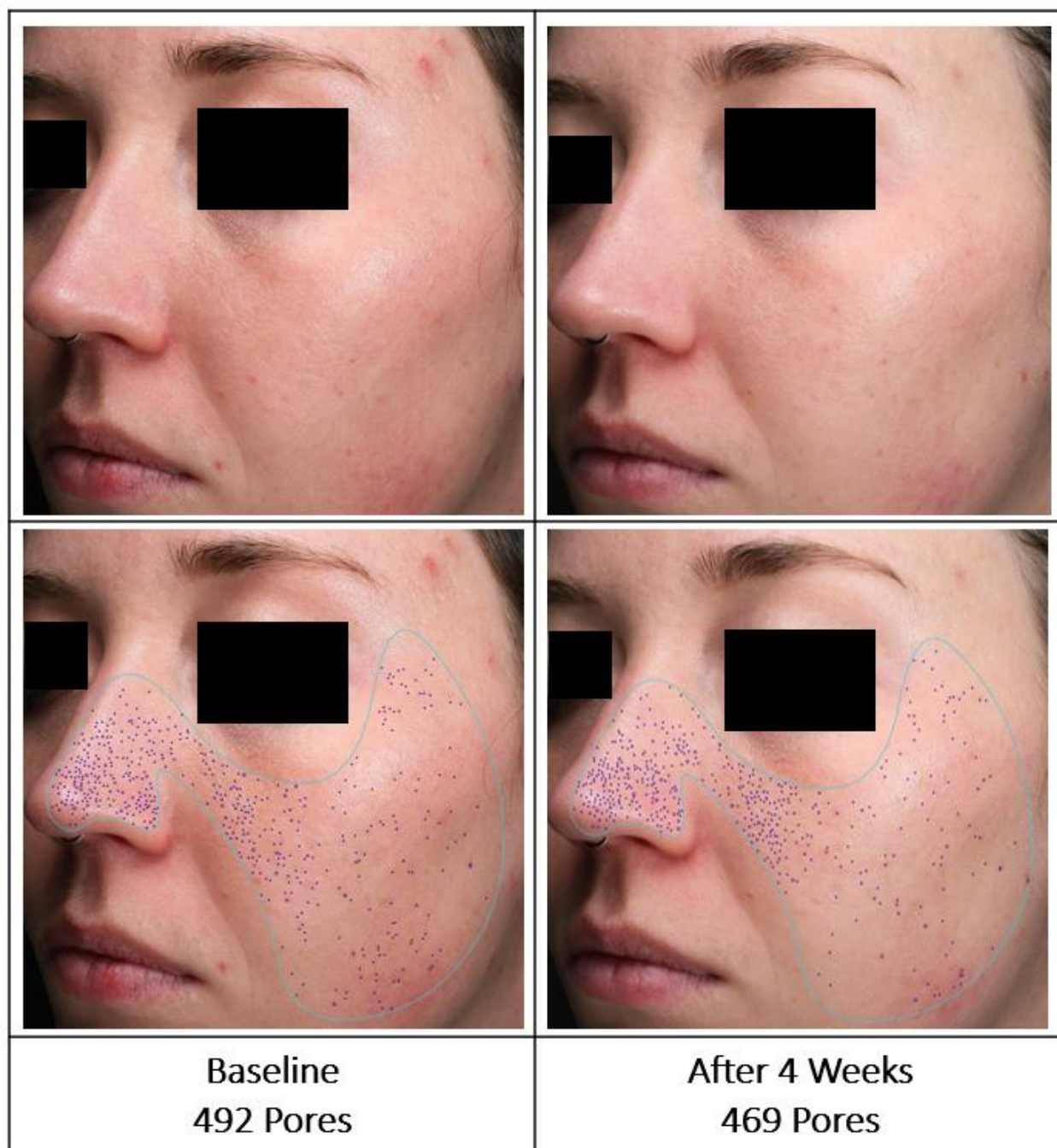


Figure 4. Images of Participant Treated with 2.0% AC Party Face Pom. Natural photos (top) and VISIA Image Enhancement (bottom) Before and After Four weeks.

Discussion

As evidenced in this six-week study, **AC Party Face Pom** reduces the appearance of pores on the face, in addition to reducing VISIA TruSkin Age™. The amount of pores present was not significantly altered throughout the study with Base Lotion application and elicited an 8% increase in overall number of pores present, compared to baseline (Figure 1; Table 3). However, applying 2.0% **AC Party Face Pom** for four weeks resulted in a 5% decrease in the overall number of pores present, compared to baseline (Figures 1, 3, 4; Table 3). Moreover, applying 2.0% **AC Party Face Pom** significantly decreased the amount of pores present compared to the Base Lotion after four weeks of application (Figure 1; Table 4). These results indicate that applying 2.0% **AC Party Face Pom** for four weeks provides a reduction of pore appearance on the face resulting in a more youthful skin appearance.

After treatment ended, the Pore Count in participants applying 2.0% **AC Party Face Pom** continued to outperform the Base Lotion alone. After two weeks of regression, 2.0% **AC Party Face Pom** application elicited a 1% reduction in pores, whereas the Base Lotion produced an increase of 5%, compared to baseline (Figure 1; Table 3). These results indicate that after treatment ended, participants applying 2.0% **AC Party Face Pom** continued to see a reduction in the appearance of pores on the face.

Additionally, the VISIA software analyzed each image and provided a TruSkin Age™ metric for each participant. TruSkin Age™ represents the age of participants' skin by comparing pore percentile scores against individuals of the same age group, skin type, and gender in the VISIA database. After four weeks of application, 2.0% **AC Party Face Pom** significantly decreased TruSkin Age™ by 7 months, while the Base Lotion demonstrated an increase of 12 months (Figure 2; Table 5). These results indicate application of 2.0% **AC Party Face Pom** for four weeks provides a reduction in VISIA TruSkin Age™ which reduces the visual impacts of normal aging.

Taken together, these results indicate **AC Party Face Pom** reduces the size and appearance of pores and simulated skin age when added to personal care applications at recommended use levels. Collectively, **AC Party Face Pom** improves skin health and provides a more youthful appearance by reducing the visual consequences of normal aging.

References

1. Sharma AN, Patel BC. Laser Fitzpatrick Skin Type Recommendations. [Updated 2022 Mar 9]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK557626/>