

MS2 condensed into five bullet points:

1. Learn the material right the first time and integrate it with other subjects. Doing well in class means you have a good grasp of the material, and integration will make reviewing for shelves and Step 1 easier.
2. Questions, questions, questions. If you're not doing questions, stop. Do question banks/books.
3. Experiment with different resources in the fall and solidify what works for you by spring.
4. Just because MS2 is a marathon does not mean everyone goes the same pace or wants to finish the same way. Do not project your expectations and goals onto other people.
5. Ultimately no matter what anyone says about you, your routines or your study habits, you're in charge of your own medical education.

MS2 Resources:

| ESSENTIAL (no order) | RECOMMENDED (most to least) | NOT VERY USEFUL TO ME |
|---|---|---|
| First Aid | First Aid Organ Systems | Najeeb's Videos ** |
| Pathoma | First Aid General Principles (except the biochemistry chapter) | Kaplan Pharmacology (Dr. Lionel Raymon) Videos ** |
| USMLE-Rx Express Videos | Rapid Review Pathology | KISS Pharmacology ** |
| Baby Robbins (Pocket Companion) | Goljan Audio + Transcripts | Picmonic ** |
| Robbins Review of Pathology | Lippincott's Illustrated Review: Pharmacology, Microbiology | Sketchy Series (Micro/Fungi/Viruses/Protozoa)** |
| Lippincott's Illustrated Q&A Review of Pathology, Pharmacology, Microbiology/Immunology | Made Ridiculously Simple: Pathology, Pathophysiology, Microbiology 6 th ed | Schaechter's Microbiology |
| BRS Pathology, Pharmacology, Microbiology/Immunology, Behavioral Science | Big Robbins, 9 th ed | |
| PreTest Pharmacology, Pathology, Microbiology/Immunology, Psychiatry | How the Immune System Works | |
| | Parham's Immunology | |

** I did not use these at all but other people liked them. Refer to the [shelf section](#) for more resources.

- First Aid is a fundamental review book but if you don't understand the underlying concepts it will be confusing and useless. Using the Organ Systems/General Principles books along with lecture really helps explain what First Aid says about a subject. You should now be using First Aid as much as possible.
- Pathoma is a fantastic lecture series that explains pathology in a simple fashion.
- Rapid Review Pathology by Dr. Goljan is presented in a bullet-format outline. I found it to be a great supplement as I was doing lectures and Pathoma. In addition to clarifying concepts, the margins have bare-essential facts that make for an excellent skim (especially for the Pathology shelf). It is, however, NOT a "rapid review" at all...the chapters are lengthy and intricate, but clarifying.
- Goljan recordings have been described as "a more arrogant and long-winded version of Pathoma." Completely accurate, and for that reason you will never forget what he says. I listened to the Goljan

lectures and then read the transcripts/RR to hammer in the information. Keep in mind that the audio material is several years old but the information presented for basic pathology is solid.

- Kaplan Pharmacology videos are like Pathoma for Pharmacology. While some of the videos are outdated (the ones I have were made in 2010) for the fundamentals they're fantastic. Some people liked KISS Pharmacology, I did not.
- I usually used Baby Robbins because it's extremely concise but Big Robbins is worth its weight in gold. My best blocks were the ones I repeatedly read Big Robbins and it just sunk into my head. Baby Robbins is the preferred resource but if you still don't understand something, taking some extra time to go through Big Robbins (after looking at another review book) is not a bad idea.
- Pathology is the only subject that truly follows a textbook and review books. Lippincott's Pharmacology and Microbiology/Immunology review books group everything together whereas class spreads material apart.

My approach to most of MS2 was as follows: throughout the week use Quizlet sets to memorize lecture material. Saturday, look at the corresponding review material books and chapters, do every odd numbered question in review books. Sunday was spent finishing anything from Saturday and going over individual lectures before enjoying a nice evening off. The week of the exam: Sunday: do the even numbered questions; Wednesday and Thursday: do all Quizlet sets and individual lectures again. I did not go to lecture at all except for one block.

There is an immense workload for each block in MS2 so I would suggest splitting it up between three or four people. I initially studied with three people and we split up Quizlet sets by lecture hour, split lecture objective answers, etc. After the second block nobody wanted to do this anymore so I carried on by myself; it was extremely exhausting. Here were my two rough daily schedules until I started studying for shelves/Step 1:

| Schedule A | | Schedule B | |
|---------------|---|--------------|--|
| 6:00 – 8:00 | Work out, get ready for the day. | 8:00 – 12:00 | Go to class and take notes. Make Quizlet sets while in lecture. |
| 8:00 – 10:00 | Review Quizlet sets of previous day's material. | 1:00 – 5:00 | Review that day's lectures. Update that day's Quizlet sets. |
| 10:00 – 12:00 | First Aid / Step 1 schedule. | 5:00 – 6:00 | Work out. |
| 12:00 – 4:00 | Camtasia that day's material. | 6:00 – 9:00 | First Aid / Step 1 schedule. |
| 4:00 – 11:00 | Review that day's lectures. Make and review that day's Quizlet sets. | 9:00 – 11:00 | Review Quizlet sets from that day and the previous day. |

Practice questions are the best way to make sure you have a solid grasp on what you're supposed to know, especially when you send them to your study partners. Here are some of the questions we sent each other:

1. NS is a 2 YO M born with meconium ileus and an elevated sweat NaCl test. NS can present with which additional symptom:
 - a) Obesity
 - b) Impaired coagulation
 - c) Normal PFT
 - d) Constipation

Symptoms consistent with cystic fibrosis → CFTR mutation → mucus plugs form → effects pulmonary, GI and pancreas systems → ingested food is not degraded → nutrients not absorbed → fat soluble vitamins not absorbed → vitamin K deficiency → impaired coagulation.

2. A 27-year old G1P0 at 12 weeks gestation presents to her obstetrician for her first prenatal visit. She and her husband both have achondroplasia, and she is curious about the chance that they will have a child of average height. What is the likelihood that a child of two individuals with achondroplasia will be of average height?

- a) 25%
- b) 50%
- c) 33%
- d) 75%
- e) 100%

Achondroplasia → autosomal dominant → no predisposition to gender → Aa genotype → Aa * Aa
Punnett square → AA, Aa, Aa, aa → AA incompatible with life, therefore Aa Aa aa → 1 of 3 = 33%.

3. LG is a newborn F with signs of photophobia, stiff neck and fever. A spinal tap reveals low glucose and high protein with significant WBC present. Her mother, MG is a 30 YO WF who went with her husband RG to a farm for a wedding two weeks ago and while avoiding alcohol, fish and prepared foods, indulged in the freshly made milk and cheese. Based on LG's symptoms, which class of medication will most likely resolve LG's infection?

- a) Aminopenicillins
- b) Cephalosporins
- c) Neuraminidase Inhibitors
- d) DNA Gyrase Inhibitors
- e) Folate Synthesis Antagonists

Recognition of meningitis → bacterial, not viral → history implies Listeria → LG age precludes use of FQ and Bactrim → Cephalosporins do not cover Listeria → Ampicillin is drug of choice, an aminopenicillin.

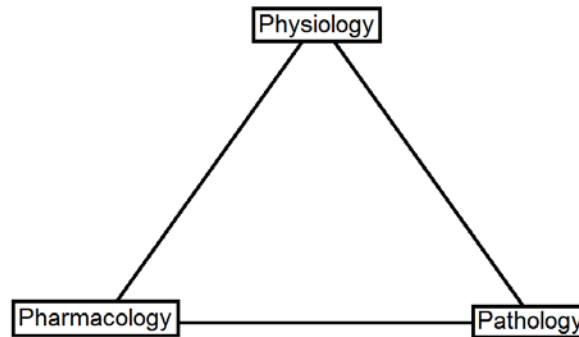
4. JM is a 15 YO M presenting with bilateral enlargement of both cheeks of his face and cervical lymph nodes. His temperature is elevated, though most other vital signs seem stable. You notice that JM's testicles seem enlarged, with a negative transillumination test. Based on JM's presentation, what is the genome of the virus causing his symptoms?

- a) dsDNA, circular, enveloped
- b) +ssRNA, enveloped
- c) -ssRNA, enveloped, segmented
- d) dsDNA, linear, enveloped
- e) -ssRNA, enveloped, nonsegmented

Parotitis + orchitis → recognition of mumps → paramyxovirus RNA virus → -ssRNA, nonsegmented.

Thought Process:

The easiest way to learn and retain information is with significant integration. **Having a great grasp on physiology will make pharmacology and pathology much easier.** My friends and I developed this way of thinking in pharmacy school and I found great success using it in MS2:



In order to know if something is broken (pathology) and then how to fix it (pharmacology), you need to know how something works in the first place (physiology). **Pathology and physiology are two sides of the same coin, and pharmacology is nothing but a manipulation of physiology.** When you're learning about a disorder, take a few minutes to re-learn the physiology and you will find things become much easier. For example, consider a blood clot. Coagulation is tightly controlled by many pathways in our body; pro-clotting agents include Factors II, VII, IX, X, ADP, TXA2, etc while anti-clotting factors include Protein C+S, antithrombin III, plasminogen, prostacyclin, etc (physiology). When there is venous stasis, endothelial damage or aberrant pro-clotting activation, the coagulation cascade is initiated and a fibrin-rich clot develops (Virchow's triad, pathology). Interventions include inhibiting pro-clotting agents with warfarin, aspirin, clopidogrel, etc or by activating anti-clotting agents with tPA and heparin (pharmacology).

This thought process becomes a little distorted in microbiology since we don't have the majority of infectious agents in our bodies intrinsically. This graph is not as simple as the model above, but has the same concepts. Blood is normally sterile can be a great medium for bacterial growth. *S aureus* is a G+ coccus resident of our body's surface (physiology) and when introduced to the bloodstream can cause a range of infections, most notably sepsis (pathology). Since it has a cell wall, agents acting to prevent synthesis or promote breakdown of the wall are efficacious (pharmacology).

Connecting pharmacology and disease patterns was another process I developed. Consider the following: HCTZ – Gitelman; Lasix – Bartter; ReoPro – Glanzmann; Linzess – *E coli* ST, etc.

Shelf Exams:

Behavioral Science:

This shelf is the first MS2 shelf you will take, and in retrospect it's the third easiest one you will take. You only need one day to prepare for it so I didn't bother making a timeline like for the other shelves.

| Materials Used: | Materials Avoided: | Did not get a chance to look at: |
|---|--|----------------------------------|
| BRS Behavioral/Psych | USMLE World Q-bank | High Yield Psychiatry |
| Pre-Test Psychiatry | Kaplan USMLE Step 1 2014 Behavioral/Psych videos | Lippincott Q&A Psychiatry |
| Kaplan USMLE Step 1 Behavioral Science Q-bank | USMLE-Rx Q-Bank | Case Files Psychiatry |
| First Aid | | |
| NBME Practice Questions | | |

BRS is good for this shelf though overall the questions in the book are sometimes oddly specific and not like the actual shelf questions. The typical board questions at the start of each chapter which are a bit more representative of the shelf, though the shelf does have occasional discrete questions as well. Using BRS as an initial study source, go over as much of Pre-Test as you can. I finished the book just in time and I thought Pre-Test was much more difficult than the shelf. I read all the answer explanations and found that to be sometimes more helpful than just doing the questions. Kaplan's Q-bank is great for ethics, because shelf also asks some ethics questions—but for the actual behavioral science part, it was not close to what I saw on the exam. If you are saving USMLE World for your dedicated Step 1 period, I would say that Pre-Test is the way to go. The Kaplan USMLE videos are probably more relevant to Step 1, because of the DSM-V update, so we have to re-learn everything – but this does not apply to the shelf. Do know developmental milestones here (compared to class) because my poorest scoring subsection was milestones. First Aid sums development up in the three-four page Behavioral section. I did not read the First Aid Psychiatry section but it is very worthwhile for this shelf. Interestingly, I had a question on Step 1 from class material which was not in First Aid!

Checkpoint:

If you have been following this guide, here are the minimum passes done throughout the year in preparation for the Pharmacology, Microbiology/Immunology, Pathology, and Clinical Skills shelves:

| | | |
|---------------------------------------|---|---|
| First Aid: 1x | Pathoma: 2x | Rapid Review Pathology: 1x |
| BRS Pathology: 1x | BRS Microbiology/Immunology: 1x | BRS Pharmacology: 1x |
| Lippincott Q&A Pathology: 1x | Baby Robbins 1x | Robbins Review 1x |
| Big Bates ~1x | Non-USMLE World question bank(s): 1x | ± Embryology 1x |
| ± Goljan audio lectures / transcripts | ± Lippincott Illustrated Review: Microbiology | ± Lippincott Illustrated Review: Pharmacology |

Using the below guide, I was able to get ≥95% on each shelf and the CBSE.

Pharmacology:

I'm not going to be much help on this exam for obvious reasons. I found it to be the easiest of all MS2 shelves, though Micro/Immuno was comparably easy.

| Materials Used: | Materials Avoided: |
|-----------------------------|--|
| BRS Pharmacology | USMLE World Q-Bank |
| Pre-Test Pharmacology | Lange Pharmacology Flashcards |
| Lippincott Q&A Pharmacology | USMLE Pharmacology Review Flash Cards |
| First Aid | Lippincott PharmCards |
| NBME Practice Questions | Lippincott Illustrated Reviews: Pharmacology, 6 th ed |
| | Katzung's Pharmacology Examination and Board Review |
| | Deja Review Pharmacology |
| | Case Files Pharmacology |
| | Any type of Step 1 question bank or video review series |

Timeline:

| 2 days out: | | 1 day out: | |
|-------------------------|---------------------|-----------------------------|---------------------|
| BRS Pharmacology | 8:00 AM – 9:30 PM | Lippincott Q&A, Ch. 3 – 7 | 8:00 AM – 2:00 PM |
| Lippincott Q&A, Ch. 1+2 | 10:00 PM – 12:00 AM | Pre-Test Pharmacology | 2:30 PM – 10:00 PM |
| | | Lippincott Micro Flashcards | 10:00 PM – 11:30 PM |
| | | NBME Practice Questions | 11:30 PM – 12:00 AM |

The reason I listed sources I avoided is so you could seek them out and potentially use them if you want. I did not exert much effort; you may need to spend the entire three days reviewing for this shelf.

This exam is a lot more straightforward than I thought it would be, especially compared to class exams. There are a lot of primary questions regarding cases: "what is X?" though at least 20% of my exam had second order and application questions. I had a lot of general principle questions so don't skip over that stuff (Vd, half life, pH, etc). Identify your weaknesses: mine were MOA of anti-parasitics and ABX resistance. I had questions on these on my exam. The question stems are not long at all and memorizing keywords can help (if I see diabetes and lactic acidosis in the stem, I'm going to put metformin and move on). I had a good amount of pictures on my exam regarding where drugs work so don't just memorize words. Also know the pressor graphs inside and out! I had multiple questions on them. The NBME practice questions are really easy and represent maybe 2/3 of the exam question types, so if you can answer them you will pass. As I emphasized before, if you know physiology you will know the pharmacology.

BRS contains several typos and errors that can be managed, and their cumulative exam is much easier than what you will see on the shelf, it's more of a "do you know the bare basics and can you identify drug classes?" Both Lippincott Q&A Pharmacology and PreTest also have a lot of errors and their questions are far more convoluted than what you will see on the shelf. Just like Biochemistry and Physiology, Lippincott's Illustrated Review for Pharmacology has more information and is almost twice the size of BRS—but has no questions, so only use it if you want to replace BRS for content. Lippincott Q&A is slightly harder than BRS and has several hundred more questions especially with pictures. If I were to redo studying for this, **I would do First Aid, BRS and PreTest.** That's all you really need.

Microbiology/Immunology:

Microbiology (125) / Immunology (25). The Microbiology section had a lot of the basic science procedures and concepts like PCR, blotting, acquisition/modes of genes and resistance, growth media, etc. so **know the basic science behind microbiology, not just the organisms.** Don't blow off basic sciences of Immunology either.

Between Pharmacology, Micro/Immuno and Pathology shelves, this was the second easiest.

| Materials Used: | Materials Avoided: | Did not get a chance to look at: |
|--|--|----------------------------------|
| BRS Microbiology/Immunology | USMLE World Q-Bank | Review of Medical Microbiology |
| Lippincott Illustrated Review: Microbiology | Lippincott Illustrated Reviews: Immunology | Case Files |
| Pre-Test Microbiology/Immunology | | |
| Lippincott Q&A Microbiology/Immunology | | |
| How the Immune System Works (review boxes + blue text) | | |
| Lippincott: Microcards / Illustrated Review Flashcards | | |
| NBME Practice Questions | | |
| First Aid | | |

Timeline:

| 3 days out | | 2 days out: | | 1 day out: | |
|-----------------------------|---------------------|---|---------------------|-----------------------------------|---------------------|
| Pharmacology Shelf | 8:00 AM – 10:30 AM | First Aid Microbiology | 8:00 AM – 12:00 PM | Lippincott Q&A Ch. 4(½) – Ch. 8 | 7:00 AM – 11:00AM |
| Lippincott Micro Flashcards | 11:00 AM – 12:30 PM | Lippincott Illustrated Review: Microbiology ← | 12:30 PM – 10:00 PM | BRS Microbiology/Immunology | 11:00 AM – 6:00 PM |
| Lippincott Microcards | 12:30 PM – 4:00 PM | Lippincott Q&A Ch. 1 – 4(½) | 10:00 PM – 1:00 AM | Pre-Test: Microbiology/Immunology | 6:00 PM – 11:30 PM |
| How the Immune System Works | 4:00 PM – 10:30 PM | | | NBME Practice Questions | 11:30 PM – 12:00 AM |
| First Aid Immunology | 10:30 PM – 11:30 PM | | | | |

How the Immune System Works is a beautiful short book which takes you through the immune system in an elegantly comprehensive yet rapid fashion. I read every word but I realize time is essential so I recommend you read the chapter review boxes and the blue text, as it has key information First Aid does not. Honestly, between First Aid and this book you won't need any other immunology resource. That said, **KNOW FIRST AID IMMUNOLOGY INSIDE AND OUT.** I had questions on minutia like CD# receptors and IL-# responses. I also distinctly remember a question that had answer choices with both the disease state AND the modes of inheritance, so you either knew all of it or had to guess like me...incorrectly.

A note on First Aid Microbiology: it would be worthwhile to look at both FA2014 and FA2015 for AIDS-defining illnesses. In real life you will use both a CD4 count and/or an infection to drive differential diagnosis and prophylactic medication. For example, if an AIDS patient presents with pneumonia, you may be thinking anything from TB/MAC to Histoplasmosis, CMV to Cryptococcus, even PCP—and those are just agents in immunocompromised pneumonia, it could be pneumococcus or other common pneumonia organisms. In considering immunocompromised pneumonia, what is more likely if their CD4 count is 180? This isn't covered in

single First Aid book, so my advice is to use both 2014 and 2015 for this particular section – you may not see it on the Shelf but it is undoubtedly useful overall. I hope FA2016 will be more integrated.

Lippincott Illustrated Review is a complete waste of time, but BRS is absolutely PERFECT for this shelf. If I could go back **I would do First Aid Micro/Immuno, Boxes from How the Immune System Works, and BRS after the Pharmacology shelf, then NBME practice questions and PreTest over the next two days. This shelf is (slightly) easier than Pharmacology and our class absolutely destroyed the exam so there is no need to go crazy studying.** If you don't do BRS before Lippincott's Q&A, the questions will be very hard and will destroy you – like it did to me. Medical Microbiology has a fantastic overall review (Part IX), case reviews and pearls (Part X and XI) and a whopping 700+ practice questions (Parts XII and XIII) that are all NBME style! It might be resource overload if you try to do everything so this can be left off if needed. As usual, PreTest and BRS come with a slew of errors so check the answer key before marking things wrong; PreTest is very convoluted (compared to the shelf) as it was for Pharmacology but will test if you really know your material.

Pathology:

This exam almost feels like a culmination of all subjects as it's extremely easy to link multiple fields and disciplines together. It is the hardest of the three main subject shelves, not counting PDCI. The practice NBME questions are deceptively easy (easiest questions make up about 5% of the exam, the rest are hard) so don't place confidence in them. In my opinion there is no one true adequate source to prepare for this shelf!

| | | |
|---|--------------------|------------------------------------|
| Materials Used: | Materials Avoided: | Did not get a chance to look at: |
| BRS Pathology | USMLE World Q-Bank | First Aid (Organ System Pathology) |
| Pre-Test Pathology | | Case Files |
| Pathoma (notes/flash cards) | | WebPath |
| Robbins Review 3 rd + 4 th (last exams) | | |
| First Aid (Pathology Chapter) | | |
| Rapid Review Pathology (margins) | | |

Timeline:

| 3 days out: | | 2 days out: | | 1 day out: | |
|--|------------------------------|---|--------------------------------|---|---------------------------------------|
| BRS Pathology Ch. 1 -16 | 8:30 AM – 9:00 PM | BRS Pathology Ch. 17 – 23 + Comprehensive | 9:00 AM – 3:30 PM | Pathoma Ch. 2 – 19 + Anki flashcards | 8:00 AM – 8:00 PM |
| Robbins Review 4th (1st 15 odd / chapters 1 – 15) | 9:00 PM – 12:00AM | Robbins Review 4th (1st 15 odd Ch. 16 – 26 + End Exam) | 3:30 PM – 7:00 PM | Pre-Test Pathology | 8:00 PM – 12:30 AM |
| | | ½ Goljan Pathology Q-Bank | 7:30 PM – 10:00 PM | NBME Questions | 7:00 AM – 7:15 AM (day of) |
| | | Pathoma Book Ch. 1+2 | 10:30 PM – 12:00 AM | Rapid Review Pathology Margins Ch. 2+3 | 7:30 AM – 8:15 AM (day of) |
| IGNORE ABOVE, USE BELOW | | | | | |
| 3+ days out | | 2 days out | | 1 day out | |
| First Aid: ALL PATHOLOGY SECTIONS | | BRS Comprehensive | | PreTest Pathology | |
| Pathoma (book) | | Robbins Comprehensive | | Practice NBME Questions | |
| | | Rapid Review Margins | | | |

You have 3.5 days to prepare but after the Pharmacology and Microbiology/Immunology shelves and studying for the past two blocks, you may elect to take a day off. Immunodeficiency is back so it's a nice continuation from the last shelf, and the vitamin/mineral section is a good review of Biochemistry. If you've followed this guide then you've already done Robbins Review and Lippincott Q&A chapters so it wouldn't be worth it to do it again. The preparation for this test is extremely variable and you may want to get other opinions on this, or make your own schedule. Since I watched Pathoma over the previous two blocks I chose to just read the book. Others I know watched the videos and were squeezed for time. If I had to redo my schedule (which was a mess of useless resources), **I would study First Aid, +/- Pathoma (whole book) and +/- Rapid Review Margins (whole book) after the Micro/Immuno shelf, then do BRS' and Robbins' comprehensive exam, ending with PreTest and the NBME questions.**

With the exam now over, **I can safely say that only First Aid partially prepares you for the Pathology shelf.** Information wise, Rapid Review would probably have been the best followed by First Aid and then Pathoma, but

FA is more concise. My very first question dealt with differences between cyanide and carbon monoxide hypoxia. We did not cover these hypoxias in lecture as far as I can remember and I had at least one additional question on this later in the shelf. Both Pathoma and RR go over the effects in detail, with RR being the better “in-depth” source for this focused subject exam. RR’s margin notes are absolutely fantastic and one of the tidbits in the two chapters I skimmed the morning of the exam got me a question right. The rest of the Pathology shelf is a mix of process-of-elimination and most-likely answers to which BRS and PreTest do not represent. These comprehensive exam questions are deceptively easy, as are the NBME practice questions, and make up only ~5% of the overall questions. The shelf questions are not as in-depth as Robbins questions, but they are just as difficult. Oh, and there is histology. There was one question I remember giving a two-sentence case and a histological picture. If you knew the disease’s classic histology, you got the question right, otherwise it was difficult as the symptoms were intentionally vague. There were also multiple questions on embryological pathology which I generally altogether ignore while studying, so that was an unpleasant surprise. It would be a good idea to go over acid-base balance and equations (Winter’s, for example). Biochemistry is also fair game as I distinctly remember a metabolic pathology question.

Our course director told us that the exam would be tilted towards the basic sciences of Pathology and since the previous two shelves had a surprising amount of this component I believed her, which is why I chose to look at Rapid Review’s introductory chapters the day of the exam. However, it did not feel like a lot of questions were basic science.

Just to wrap up any other resources: while I did not do First Aid for this shelf, something I regret, from doing three passes prior I remembered a lot and of all the resources I did it was the most applicable. USMLE-Rx Med/Hard questions are somewhat similar to the questions you will see on the exam so that’s not a bad resource either. Kaplan’s questions are on the harder side but may be useful. Lippincott, like Robbins, may be too specific for the shelf. Goljan’s question bank will make you cry, I routinely scored ~50% on most sections and stopped halfway through. If you’ve listened to his audio lectures a few times, hopefully they stuck in your head.

This is going to be weird, but looking at the PreTest book for Clinical Skills is not a bad review of Pathology at all. It has useful mnemonics and the questions, while challenging, place a great emphasis and review on clinical pathology.

Overall, I don’t know how else to put it: no matter how much I studied, how many resources I used, I just did not feel prepared for the exam, but apparently neither did the rest of the examinees.

Introduction to Clinical Diagnosis:

Everyone told me this exam was the most variable to study for. Accordingly, I prepared very little for it. It almost felt like taking three blocks of Step 1 or Step 2.

| | | |
|--------------------|--------------------|--------------------------|
| Materials Used: | Materials Avoided: | Did not want to look at: |
| Bates Pocket Notes | USMLE World Q-Bank | Anything else |
| Pre-Test | | |

Timeline:

| | | |
|-------------------------------|------------------------------------|----------------------------|
| 3 days out: | 2 days out: | 1 day out: |
| First Aid: BSE + Biochemistry | Pocket Bates Ch. 3 – 20 (red text) | PreTest Clinical Diagnosis |
| | | NBME Practice Questions |

In hindsight the review section at the back of PreTest is pretty awesome for a general Pathology overview and has great mnemonics. Since I actually had to read all of PreTest's answers this time I elected to spend the entire day doing the book. One of the best things about the book is that there are virtually no answer errors. The material felt more Step 2-based with an emphasis on guidelines.

Most of our shelves are loosely based around PreTest. This is different—this shelf was almost exactly like PreTest. Just as difficult and similar answer choices, outside of some arbitrary diagnostic tests and diseases we haven't learned.

Comprehensive Basic Science Exam (CBSE):

Congratulations on making it this far! This exam is comprised of four blocks (184 questions).

Since you have just studied for and therefore covered the majority of testable subjects in the past four shelf exams, all that's left is to review are the first two chapters of First Aid (if you didn't during the PDCI shelf) and the Rapid Review section. Take a day to review those (and any other subjects you are weak on) so the next three days can be spent be doing questions. I realized I hit my peak a long time ago and I needed to review everything so I looked at my notes and flashcards before attempting any question banks. If you haven't already, **LOOK AT FIRST AID'S ERRATA PAGE**. It is frustrating that such an essential resource has so many errors.

| Materials Used: | Materials Avoided: | Did not get a chance to look at: |
|------------------------------------|--------------------|----------------------------------|
| First Aid Q&A | NBME 11-17 | First Aid Cases |
| Kaplan Q-Bank Simulations | Crush USMLE | PreTest USMLE Step 1 Vignettes |
| NBME Free 150; NBME 1, 7 | Step-Up to Step 1 | |
| USMLE-Rx (finished question bank) | | |
| USMLE World (finished up to 2000Q) | | |
| NBME Practice Questions | | |
| Flashcards (Pathoma Anki, Quizlet) | | |

Timeline:

| 3 days out: | | 2 days out: | | 1 day out: | |
|--|-------------------------------|---------------------------------|------------------------------|---|--|
| USMLE-Rx Quizlet sets | 8:00 AM – 11:00 AM | Kaplan Q-Bank Full Simulation 1 | 8:00 AM – 2:00 PM | First Aid Rapid Review | 8:30 AM – 9:30 AM |
| Kaplan Quizlet sets | 11:00 AM – 3:00 PM | Kaplan Q-Bank Full Simulation 2 | 2:00 PM – 7:30 PM | NBME Free 150 (1 st 50 Q) | 9:30 AM – 10:15 AM |
| USMLE-Rx Question Bank (FINISH) | 3:00 PM – 6:30 PM | NBME 1 | 7:30 PM – 9:00 PM | NBME Practice Questions | 10:15 AM – 10:30 AM |
| First Aid Q&A (1 st – 25 of Ch. 1 – 17) | 7:00 PM – 11:00 PM | Game of Thrones | 9:00 PM – 10:00 PM | USMLE World Test 09 (46 Q random timed) | 10:45 AM – 11:25 AM; Review 12:00 PM – 1:20 PM |
| First Aid Q&A Blocks or review First Aid / Pathoma / USMLE World | | NBME 7 | 10:30 PM – 1:00 AM | USMLE World Test 10 (46 Q random timed) | 1:25 PM – 1:55 PM; Review 2:05 PM – 2:45 PM |
| | | | | USMLE World Test 11 (46 Q random timed) | 2:55 PM – 3:30 PM; Review 4:00 PM – 4:40 PM |
| | | | | USMLE World Test 12 (23 Q random timed) | 5:35 PM – 6:00 PM; Review 6:15 PM – 6:30 PM |
| | | | | Pathoma Flashcards (½ deck, random) | 7:00 PM – 9:00 PM |
| | | | | NBME Free 150 (51 to end) | 9:00 PM – 10:00 PM |

Regarding question banks: Do not bother doing individual chapter questions from First Aid Q&A if you have USMLE-Rx. The questions are almost the same. The cumulative blocks may be worth it if you want to do more questions. Do not do NBME 1 unless you want to feel vitriolic anger at how easy board exams were a decade ago. NBME 7 is more difficult than NBME 1 and is a good starting point after your content review. I avoided the later NBME exams since I planned to use them during my dedicated Step 1 period. Doing two full-length Kaplan exams let me know where I stood and compared to the CBSE, the questions are similar but harder and featured way more significant (sometimes unnecessary) integration. As you do USMLE World, you will realize how important buzzwords and pathognomonic findings from First Aid are. Now that you've covered the material 2-3 times on top of the shelves you will undoubtedly start getting 80%+ on each full block. My 3.5 blocks of USMLE World were easier than the CBSE. **Interestingly, USMLE World Self-Assessment 1 had multiple similar/almost exact questions as the CBSE.** The usual 20 sample questions are easy, but the NBME Free 150 (actually only 132 questions but it's known as 150) is a great representation of the questions on the exam and has a positive correlation to how you will do. If you do nothing else, **I strongly recommend you do the free NBME 150.**

Regarding questions on the exam: This exam spanned the entirety of First Aid and then some material. Not a single topic was ignored. **The best way to prepare for the CBSE is to look over First Aid if possible, reinforcing your knowledge with a question bank like USMLE-Rx Med/Hard, Kaplan or USMLE World on randomized timed mode.** I think the ratio was about 60:20:20 for easy:medium:hard questions. I was not expecting the Psychiatry questions that were on the exam or the gross Neuroanatomy questions (5 or 6 in total). It would not be a bad idea to look over brain slices and effects of arterial occlusion. There were no heart sounds on our exam. A few weird biostatistics/epidemiology questions. One thing I would like to stress is that we had no in-depth biochemistry metabolic pathway questions, it was all factual or definition. There were a lot of words on the exam that I did not know the definition to. **The majority of our exam was more memorization rather than conceptual or logic based.** Pathoma was not as helpful as I hoped it would be so you can safely ignore it. Most people found the exam to be easy overall – or at least easier than was expected from a cumulative board exam.

And that's it. MS2 is over; you have now entered your dedicated Step 1 review period!

