For the records

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Startup or not, your company needs to put in place a process for establishing and maintaining high-quality financial records.

Whether your biotech firm already has products in the market or is still in the development stage, you should be paying careful attention to your finance and accounting function. This may be a somewhat scary topic, but it really doesn't have to be. A little bit of knowledge and up-front planning can save you a lot of time down the road as your company matures and grows. It will also give you peace of mind that your company is on solid financial footing, allowing you to focus on addressing more pertinent business opportunities and challenges that lie ahead. Having a solid team is key and will involve the use of internal and/or external resources with the skills needed to help you build an appropriate infrastructure.

Because your financial records provide a historical snapshot of your company's operations, their value can often extend past usefulness to the 'bean counters'. They can also provide a window into your organization's financial future. Keeping everything in order will help you maintain compliance in regard to a variety of matters, including administrative, legal, regulatory (if applicable), tax and funding-related issues.

While we aren't providing any kind of official accounting or tax advice here, we do hope to provide you with some background on the different bases of accounting, the various skill sets of accounting service providers and some considerations regarding the selection of an accounting system. We will close with an introduction to the concept of external audits, which is often referred to as the ultimate end-goal of financial statement preparation.

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Choosing a basis

'Closing the books' doesn't need to be a daunting phrase. It just means that you have done your due diligence and have appropriately captured information in your financial records at the end of each reporting period. That said, the amount of effort required to close the books will generally depend on the basis of accounting you use for your business.

There are essentially three bases of accounting, and you will need to select one. Each has individual benefits and drawbacks, so we've provided a short primer on their differences.

Cash basis. This method is the easiest to implement and should be pretty familiar if you regularly balance your checkbook (which we hope you do!). Under the cash basis, you will recognize revenue the moment you collect from your customers and recognize expense when you make payments to your vendors, employees, lenders and any other third parties. Of course, you'll need to regularly reconcile your bank statements with your internal financial records regardless of the accounting basis that you elect.

As the saying goes, 'cash is king,' and this is particularly true for the cash basis of accounting—with this method, there are few other complicating factors to consider. However, there will be differences between your bank statement and your financial records that need to be reconciled. In general, these will consist of:

- Deposits in transit: These are deposits that you have made, but the bank has not yet processed. This simply reflects a timing difference between your records and your bank statement. So long as you have already accounted for these deposits in your financial records, the difference is OK.

- Outstanding checks: These are payments that have been made either via check or electronically, but that haven't yet been processed by your bank. They could be outstanding for longer periods than deposits in transit, depending on the recipient's punctuality, but so long as you have accounted for the transactions in your financial records, you'll be fine. The bank will just catch up later.

- Bank fees and interest income or expense: These are transactions that the bank is aware of (after all, they calculated the amounts) but you are not. Handle this by adjusting your financial records at the end of each period when the amounts are identified.

- Miscellaneous: There are items that neither you nor the bank might have record of or that might relate to other differences in timing or actual dollar amounts. It's important to resolve these items on a timely basis to prevent them from accumulating, which leads to difficult and complex reconciliations. You may need to work directly with the bank to resolve these discrepancies. This might also mean working with a third party, especially for outstanding checks.

You shouldn't worry if you find some or all of these differences as you close your books. It's completely normal! Just make sure that you have processed the necessary adjustments so that your accounting records are properly stated.

Accrual basis. This basis is more complex than the cash basis. It's more focused on *when* revenue has been earned and *when* expenses have been incurred. For example, if you have ordered and received some office supplies, but haven't yet paid the bill, you wouldn't record anything under the cash basis. However, this would be an expense under the accrual basis because you know that you need to pay that bill. The primary concern here is obligations—either as a customer or vendor—which will eventually turn into a cash-based transaction. Under this basis, transaction *amounts* will usually be equivalent to those under the cash basis, but the timing of the transactions may be different.

This accounting basis is more difficult because *when* things occur can sometimes be fairly subjective. However, once processes are established, compliance should be relatively straightforward. Two of the most important processes here are:

- Accounts receivable and deferred revenue: Until services have been provided or products delivered, revenues will be considered deferred. On the flip side, revenue may be earned in advance of generating an invoice, and unbilled accounts receivable should be recorded in order to recognize the revenue. The unbilled amount will clear in the following period as the invoice is generated. (Companies often recognize revenue based only on invoicing, but this treatment can be inaccurate; invoice information can often differ in timing and amount from revenues actually earned.)

- Accounts payable: You need a process to ensure that all vendor invoices have been properly accrued. You also need a system to identify invoices that have not yet been received but for which expenses have already been incurred (for example, when you've already received services, but the invoice has not yet been sent). As such, you'll need a separate accrual, which will clear in the following period as the invoice is received. (Companies often recognize expense only when vendor invoices are received, but this can also be inaccurate.)

This basis will help you to identify future sources and uses of cash. Your added familiarity with accruals should help a great deal with budgeting and forecasting.

This basis results in a larger balance sheet than under the cash basis because additional assets and liabilities are recorded. It will also affect your income statement through the timing of recognizing revenues and expenses, which may be earlier or later than under the cash basis. Its use also brings a third financial statement into play: your cash flows. Even though you will use accruals for determining your net income for the period, it's important to understand your cash flows and determine whether you are generating or burning cash. Therefore, cash reconciliations have just as much importance under this basis.

In addition to regularly reconciling cash, you will need a solid closing process for period ends, including reconciliations for accounts receivables and payables, as noted above. Regular reconciliations of other account balances should also be performed. Putting standard processes in place should ensure that transactions are not missed or recorded incorrectly.

A best practice will be to assign to a specific individual (or individuals) the responsibility of closing the books. This will include developing and managing a timeline, assigning reconciliation responsibilities and performing general oversight of the accounting records. Furthermore, you should develop processes for individuals in other areas of the company to review certain elements of your financial statements. Because these individuals are more involved with the company's operations, it's important that they have the ability to review and provide input on financial results. Their knowledge of the company's financial performance will also help when developing a formal budget and preparing comparisons to actual results. A regular meeting with your management team to analyze budget to actual comparisons is a best practice.

Generally accepted accounting principles (GAAP). The application of GAAP is a much more complex use of the accrual basis. This is especially true in the biotech industry, as subjective judgments may be required on a regular basis.

This basis calls for applying specific principles and rules to determine when revenues have been earned or expenses have been incurred, as well as how to value specific types of transactions. For example, recognizing expense associated with stock options will be required, even though you're not ever going to give the recipients cash. The following is a representative (but incomplete) list of some common types of transactions in the biotech industry that may result in complex accounting treatment under GAAP:

- Collaborative agreements, including revenue, profit or cost-sharing arrangements

- Other complex revenue agreements, which may involve multiple types of products or services and which are delivered over different periods

- Non-cash transactions (as a customer or vendor, including issuing stock options to employees and vendors)

- Debt issued with stock warrants

- Investments in equity and debt securities

- Joint ventures

- Mergers and acquisitions

Public companies and those pursuing an initial public offering (IPO), as well as private companies that are financed with bank debt, will usually be required to use the GAAP basis. For companies with venture capital and private equity investors, GAAP may also be required, or just preferred. Also, if you anticipate merging with or being acquired by a public or large private company in the future, or may be entering into a complex collaborative agreement, use of the GAAP basis may improve the likelihood of closing a deal.

Using GAAP means that your organization will have to undergo regular updates to its systems and processes in order to stay compliant with constantly changing rules, regulations and interpretations. External auditors will often require you to use this basis in order to give an opinion on your financial statements, something we'll elaborate on more below. If your business is fairly simple, there may not be significant differences between the accrual basis and GAAP basis, but you should obtain assistance by either hiring qualified internal personnel or identifying an outsourced service provider to help, as some GAAP rules are specific and obscure in nature.

For companies that undergo an external audit, these issues are often identified by the external auditors when they first audit the company's financial statements. However, in order to maintain independence, the auditors may be reluctant to help calculate the necessary adjustments, and obtaining help in advance of the audit may reduce inefficiencies, extra costs, painful headaches and lost sleep.

If you will be using Internal Financial Reporting Standards (IFRS) or other modified accrual-basis accounting methods that are similar to GAAP, you will probably still require additional assistance to ensure compliance.

Regardless of the accounting basis you initially select, as your business grows you'll probably need to move to a more sophisticated and complex basis. It will help to keep in mind the pros and cons of each basis when making your basis election (**Table 1**).

Accounting skill sets

Now that you know what types of accounting there are, who's going to do it all? As a senior executive, you should always stay involved to some degree in the preparation of the company's financial statements, but you will need help. In the United States, accountants generally come in three flavors: bookkeepers, accountants and Certified Public Accountants (CPAs).

Table 1 The pros and cons of different accounting approaches

Basis of accounting	Pros	Cons
Cash basis	Easy to implement Lower skill set required Limited differences from tax basis	No future cash flow information Minimal operational information May not be acceptable for investors or other interested parties
Accrual basis	Information regarding future cash flows is available Operational information is available May be acceptable to investors and other interested parties	Moderate complexity to implement and additional costs will be incurred Formal procedures and implementation of accounting software will generally be required. Moderate skill set required
Generally accepted accounting principles basis	Includes both operational and future cash flow information Generally accepted form for use by all internal and external parties (especially if an IPO is planned)	Complex to implement and related costs may be significant; sophisticated systems may be necessary Experienced skill set(s) required (CPAs)

- Bookkeepers can generally address the cash basis of accounting and may be able to handle many aspects of accrual-basis accounting, but this will usually depend upon experience. However, part-time bookkeepers are often a great option for startups.

- Accountants can generally handle the cash and accrual bases of accounting and may be able to address certain GAAP issues, but this will depend upon their specific experiences.

- CPAs can generally handle all bases of accounting and understand the underlying principles of GAAP, including how to research unfamiliar, complex issues. But note that CPAs come in two flavors: tax CPAs and GAAP CPAs. All CPAs should be familiar with both areas, but they will generally specialize in one or the other (**Box 1**).

You may decide to hire individuals with certain skill sets as full-time employees, while other skill sets may be outsourced or cosourced to meet your needs. Certainly consider prior knowledge of your industry, as the accounting is fairly specific and past experience will be key.

The other primary considerations will be when and how often you will need help and the associated cost. Using full-time employees for your accounting is probably cheaper on a per-hour basis than outsourcing, though this will be a fixed cost and you'll have to take into account benefits, taxes and overhead. Outsourcing your accounting may be more expensive on a per-hour basis, but the cost is variable and generally doesn't come with significant incremental costs on your part.

Accounting systems

The primary system of record for your financial statements will be your general ledger, but this ledger can take many forms. It can be as simple as an old-fashioned bound ledger book, where individual transactions are tracked by hand, but these days it is almost always something a bit more sophisticated (that is, computerized). If you're a startup, you might use a series of Excel spreadsheets, but you'll probably realize that the amount of effort required to maintain them makes an actual accounting system more preferable (**Box 2**).

Your general ledger accounting system will be the backbone of your financial statements and often includes reporting tools that are intended to give you basic financial statement reporting with little to no effort. However, data integrity will be critical, so perform consistent reconciliations and use qualified individuals to minimize the risk of inaccuracies.

Regardless of the general ledger system in place, you might also need add-on systems. For example, Equity Edge or eProsper are often used to track employee stock option activity, although smaller companies may also track this information in Excel spreadsheets. You should ask the accounting system's provider about other software that is regularly used in conjunction with it, and ask for references from people who have experience using them. Just remember that having qualified individuals and strong closing processes can often be more important than the systems you elect. Systems will process information on a garbage in/garbage out basis, and people will be your last line of defense.

A time will probably come when you determine that your business can no longer effectively function on the current software platform, and you'll need to change to a more complex system. This can occur when you start selling multiple products, begin operating abroad or enter collaborative agreements. As your business grows, your system needs to grow with it. Just remember that as your systems get more complex, you will need qualified individuals to implement and maintain them.

External audits

An external audit could be necessary either as a result of specific requests by investors or because you are anticipating an IPO or other liquidity event. Either way, you will need a third-party CPA firm to perform these services. They will normally perform the audit on the GAAP basis of accounting and will perform audit procedures on your financial records and supporting documentation to determine

Box 1 The taxman

The US Internal Revenue Service (IRS) allows the use of a cash or accrual basis, but has very specific rules for how the bases are to be applied and how certain numbers are to be calculated. However, that means you have to make another decision regarding your financial records: are they being kept for tax purposes or for other needs? This difference is most important if you decide to use the GAAPs basis of accounting, which has its own set of specific rules that are not consistent with tax code.

If you decide to keep your financial records for non-tax purposes, you will probably have to make adjustments to your financial records in order to prepare your tax filings—and vice versa. These adjustments will generally be prepared outside of the system and should be manually tracked to ensure that you keep and maintain the appropriate level of support. Your only other option is to maintain two separate sets of financial records, but this is very rarely done because it's quite difficult to do properly. As long as you have the proper resources and processes in place, it is generally easier to make manual adjustments to your financial records outside the system in order to prepare the information needed for other purposes (for example, IRS filings, regulatory reporting and so on).

Box 2 Choose your weapon

The following noninclusive list should give you a starting point for assessing accounting programs. Remember that different systems carry pluses and minuses, and you need to choose one that best fits your company's needs. For simpler businesses, more basic systems may be appropriate, whereas for more complex businesses, you'll need more robust systems. Your peers are a great source of information—ask what their individual experiences are with each system. You can also contact the software providers and obtain product demos to help you make your decision as to what will work best for your organization.

QuickBooks (http://quickbooks.intuit.com/)

Peachtree (http://www.peachtree.com/default.cfm)

Microsoft Dynamics (formerly Great Plains) (http://www.microsoft.com/dynamics/en/us/default.aspx)

SAP (http://www.sap.com/usa/index.epx)

Oracle (http://www.oracle.com/index.html)

the accuracy of your company's financial statements. The accounting firm will be subject to strict independence requirements and will be hired by the board, rather than by management, though management is generally expected to recommend a firm to the board and has to work with the firm to complete the audit. As such, the auditors will generally be restricted to the types of assistance that they can provide.

Auditors can also provide compilations or reviews, which carry a lower level of reliance and may allow them to provide additional services to the company. Have a discussion with all parties interested in the company's financial statements and then determine the appropriate level of reliance needed before engaging an external audit firm.

If you do determine that an external audit is necessary, you should consider hiring help to *prepare for* the audit. Your internal accounting function may be thinly staffed, and additional resources may be required to minimize delays and maximize audit efficiency. Many boutique accounting firms specialize in this area and are composed of ex-auditors who also have industry experience. Alternatively, you might decide to expand your organization to handle the increased workload. Just make sure that the resources have experience working with and preparing for external audits! You will sleep better knowing that they are familiar with the audit procedures and that your financial statements are in good hands.

Conclusion

So now you're armed with an understanding of the different bases of accounting, the various skill sets of individuals who can help, important system considerations and a basic understanding of the types of services that external audit firms can provide. You will need to make choices that give you the best balance of flexibility and ease of implementation, and your peers can probably help provide a lot of valuable insight as you move down this path. Just remember that the decisions you make as your company moves forward will probably have a significant impact on your financial statements, even if they don't appear to have an immediate and direct financial consequence. Getting the right resources in place, be they people, processes or systems, will be essential to ensuring your success. History has a habit of repeating itself, and the more you rely on the advice of those who have gone before you, the more you can hope to avoid their mistakes. And the more you can avoid these problems, the more you can focus on the business of helping patients.

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